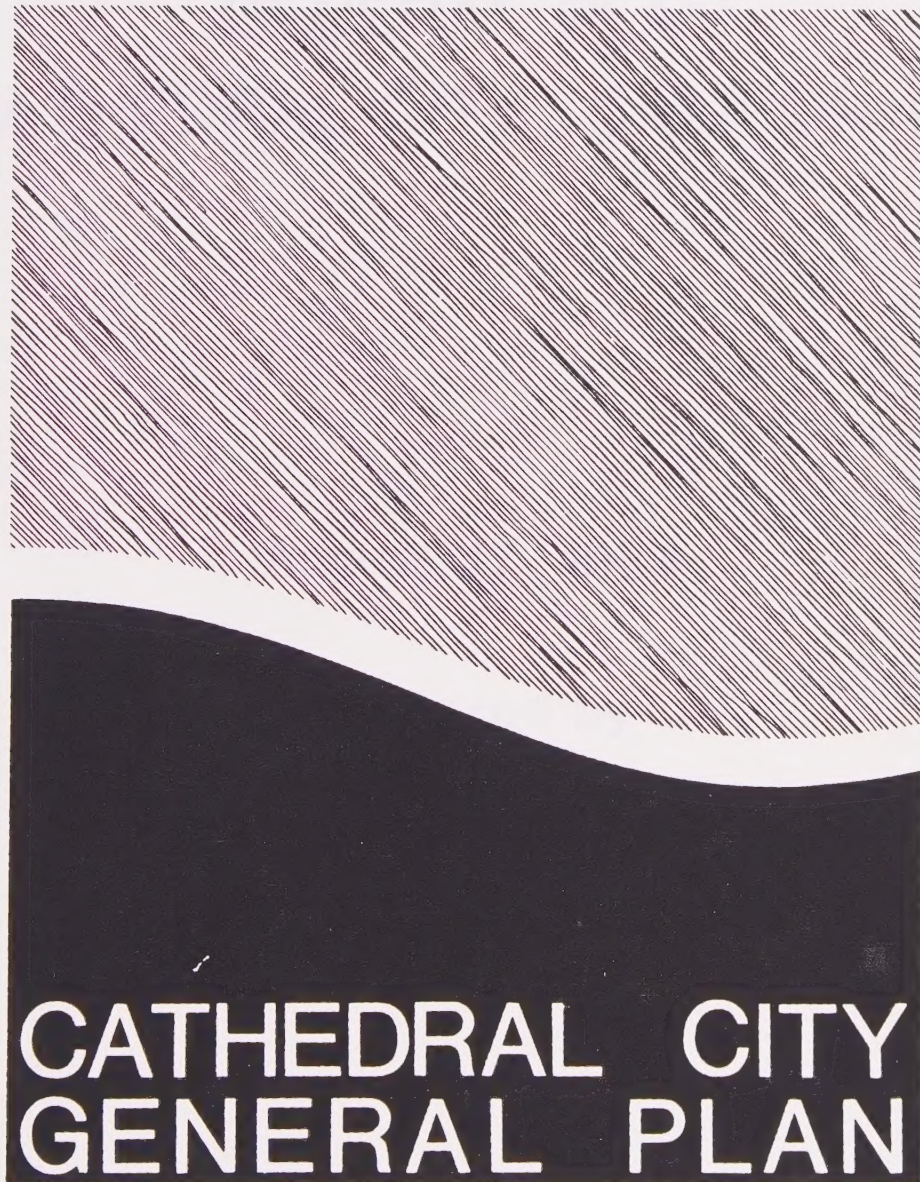


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**GENERAL PLAN  
CATHEDRAL CITY , CALIFORNIA**

**August 17, 1983**

**Prepared by**

**THE PLANNING CENTER  
and  
THE KENNETH PHILLIPS GROUP**



# GENERAL PLAN CATHOLIC CITY, CALIFORNIA

August 11, 1964

Presented by

THE PLANNING CENTER  
and  
THE KENNETH PHILLIPS GROUP



# CATHEDRAL CITY GENERAL PLAN UPDATE

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I.

## FOUNDATION







This General Plan is a tool to be used in making decisions about the development of Cathedral City. The Plan is action oriented. That is, it attempts to make things happen. If they are the right things, Cathedral City will gradually become a better place for people to live, work and play than it is now or than it would be without this General Plan.

The first thing to do so people affected by the Plan can understand what it means to them is to describe the facts and ideas that it is based upon: in other words, the foundation. That is what this first section is about.

#### A. BACKGROUND FOR PLANNING

It is necessary to understand what kind of place Cathedral City is now and how it got that way before trying to imagine its future. The following discussions cover the most essential points in this background.

##### 1. THE LAND AND THE PEOPLE

The City presently covers approximately 9400 acres. Most of that land, the part north of Highway 111, is quite flat. A large portion of the flat land is subject to blow sand. The area south of Highway 111 is divided between a steeply sloping cove and the rugged foothills of the San Jacinto Mountains.

The land in this desert region is powerfully shaped by the occasional flow of water as well as the more regular scouring by the wind. The City is sliced by the Whitewater River in a generally northwest/southeast direction. Tributaries flow out of both sides of Cathedral Canyon, joining the Whitewater River near the intersection of Date Palm Drive and Highway 111.

The rocky foothills, the cove, the water courses and the expanse of windblown sand are the most dominant natural physical features of Cathedral City. The sandy slope of Flat Top Mountain and Edom Hill frame the City to the north.

Significant man-made features include the freeway (I-10) and railroad which parallel the diagonal northerly City boundary; extensively improved but sparsely settled residential subdivisions in the central and northern sectors of the City; flood control improvement along the Whitewater River and Cathedral Canyon washes; and the extensive but incomplete highway system. Two date palm groves remain, one on Plumley Road and the other north of Highway 111 at the west edge of town.

Existing development forms a fairly distinct pattern. The real center of town is now the Highway 111 corridor, although it is gradually moving north with new development



along Date Palm Drive and Ramon Road. Fairly large scale residential developments lie north of the Whitewater River with the beginnings of shopping areas along Date Palm Drive at Gerald Ford Drive and 34th Street as well as sections of Ramon Road. The cove is largely devoted to conventional houses on individual lots. Beginning in a northerly direction generally at 34th Street the development becomes very spotty with many more vacant lots than developed ones. The northern portion of the City is largely vacant acreage.

The overall pattern of development is most concentrated within a mile or so of Highway 111 with gradually decreasing intensity to the north, bordered by generally vacant land in the blowsand area to the north and undeveloped hillsides to the south.

In 1980 almost 9800 people lived in the 4244 occupied housing units counted in the Census. Actually, the Census recorded a total of 7288 housing units (single family houses, condominiums, apartments, mobile homes) but over 2900 (40%) were vacant and used only part of the year.

The average (median) age of Cathedral City's population is 43.9 years, a relatively high figure. Almost a quarter of the City's residents are 65 or older. Partly because of this large retirement age population, the average family size is 2.3 persons. This is not particularly small as desert retirement communities go, but it is low for a family oriented residential community.

Most residents, over 86%, are white. Included in that 86% are residents of Spanish origin. They account for 19% of the total population. There is a wide variety of other racial origins represented, including less than one percent each of blacks and American Indians.

## 2. THE URBAN SETTING

The focus of this General Plan is, as it must be, on Cathedral City. Yet, it is essential in thinking about Cathedral City to consider what is around it. As indicated on the Urban Setting map, Exhibit 1, Cathedral City is located in the upper end of the Coachella Valley.

If you enter Cathedral City from the freeway, it presents an appearance of being somewhat isolated and rural. That is because of the amount of open land in that part of the City, which also extends well beyond it in both directions. If you enter along Highway 111 there is an impression of a tight, congested hodge-podge of development of generally lower quality than what you just passed through.



# URBAN SETTING



## CATHEDRAL CITY GENERAL PLAN



Both impressions are accurate, but incomplete. Cathedral City is one link in the chain of "cove" communities stretching along the base of the San Jacinto Mountains in the Coachella Valley. The two links to which Cathedral City connects are Palm Springs to the west and Rancho Mirage to the east.

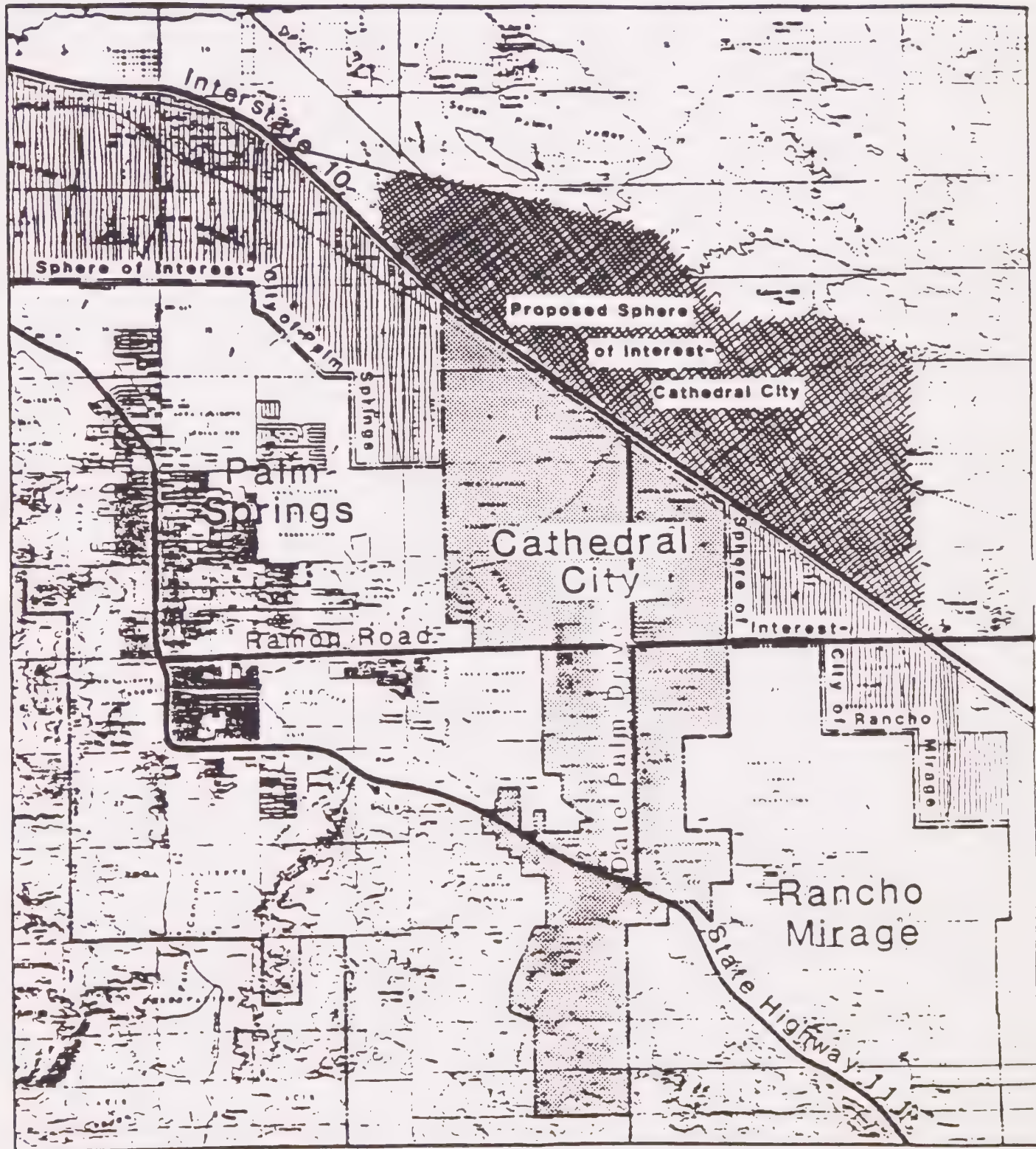
Highway 111 threads its way along the toe of the foothills and provides the traveler with a quick comparison of the communities it ties together. The two adjacent cities, Palm Springs and Rancho Mirage, are quite different from Cathedral City. They are considerably more affluent, are much more resort oriented, have been incorporated far longer and have achieved a quality image through their ability to control how land is developed. Mainly, they have an image to project and have succeeded, in large measure, in doing so.

The Spheres of Interest map, Exhibit 2, paints a picture that cannot be seen clearly on the ground. It shows that Cathedral City is completely sandwiched between its two neighbors to the south, east and west. This is so in two ways: 1) by actual City boundaries, and 2) by adopted spheres of influence that extend all the way up to the I-10 freeway. While spheres of influence are certainly not as firm as incorporated City boundaries, they do represent a strong policy that a certain city will eventually have jurisdiction.

The result is that Cathedral City only has room for expansion to the north, beyond the freeway. It is reasonable to question the purpose for even considering such expansion when there is already so much vacant land to the south of the freeway. The answer lies in the discussion of Cathedral City's future to follow.



# SPHERES OF INTEREST



## CATHEDRAL CITY GENERAL PLAN

CVU10



### 3. ECONOMIC CONDITIONS

There are two major aspects of the City's economy to highlight: 1) the income levels of its population, and 2) the strength and stability of its business community.

The estimated median income of Cathedral City households is less than \$10,000 - lower than the countywide average and considerably lower than the two adjacent cities. This reflects the fact that, although there are a few developments occupied by the relatively affluent, most of the community's households are workers with average or lower incomes. This means that the costs of improvements in community services and facilities and the impact of increases in such already burdensome living costs as the unusually high monthly energy bills fall particularly hard on a great many families and individuals. The economic condition of the population is generally one which requires restraint on any plan proposals which would increase costs.

The business community in Cathedral City is in transition. Older, relatively small scale businesses abound, particularly in the Highway 111 corridor, along Date Palm Drive and on Ramon Road. However, newer businesses, both small and large, are rapidly emerging. Two notable examples are the existing National Lumber Center and the Gemco store now under construction. They are significant for at least three reasons: 1) their high quality; 2) their large size; and 3) the extent of their market beyond Cathedral City. These projects are evidence of Cathedral City's relatively strong economic performance since incorporation, as evidenced by such indicators as sales tax revenues.

The relative strength of the City's economy is a valuable ingredient in its ability to face the future confidently.

### 4. HISTORY

Cathedral City existed for many years as an unincorporated community under County jurisdiction. It is a place that absorbed development not accepted by the more restrictive cities on either side: initially, Palm Springs and later, Rancho Mirage. Large scale residential projects were approved years before there was even a market for the huge inventory of loss.

In the early 1970's Riverside County prepared and adopted the Cove Communities General Plan for the area extending southerly from Palm Springs. It envisioned basically a continuation of the development pattern that had already taken shape in Cathedral City: random businesses along Highway 111 and eventual suburban expansion out to the freeway.



Finally, the community leadership succeeded in putting together an incorporation movement which, after three failures, succeeded in achieving cityhood in 1981. An indication of the concerns that motivated this effort is the fact that the currently adopted Rancho Mirage General Plan included almost a third of what is now Cathedral City: everything to the east of Date Palm Drive.

## 5. BASIC ASSUMPTIONS AND CONCLUSIONS

The most fundamental assumption regarding Cathedral City's future is that it is now and will remain part of a high growth area within the Southern California region. The relative strength of the Coachella Valley's growth potential is expected to increase.

A second important assumption is that the money shortages now faced by local government will continue for some time with relatively little assistance by State and Federal programs.

A third assumption is that inflation will continue for the foreseeable future, accompanied by significant increases in the cost of essential services and facilities. This will be particularly true of energy in all forms.

A fourth assumption is that the basic resources and utilities essential to sustain growth and development will continue to be available in adequate amounts and at acceptable costs.

Finally, it is assumed that the direction and orientation of the existing City leadership will be sustained, even as new council members may eventually take office. This continuity of basic direction is critical because action flowing from the General Plan will take a long time to complete. Significant shifts in policy and priority could be very disruptive and costly.

There are several conclusions about Cathedral City that form the basis for this General Plan. The first and most important is that this City has the potential to be a successful, balanced community. This means several things: 1) it will provide housing over a wider cost range than now exists, but will still be a place that welcomes working class families with low to moderate incomes; 2) the economic base will become both stronger and more diversified; and 3) City government will continue to function at a modest but effective level to support the community's development.

A second conclusion is that the visual blight which contributes to a poor City image can be reversed at reasonable cost and without imposing undue regulations and



restrictions. This will take longer than a more aggressive stance but will be fairer and more effective in the long run.

A third conclusion is that the apparent liability of extensively improved but undeveloped subdivision lots can be converted to an advantage through judicious use of development incentives.

A fourth conclusion is that the City can and should pursue a variety of strategies to strengthen even further its already impressive economic base.

Finally, it is concluded that retaining both the reputation and reality of being a community in which people of modest means may live along with those who are more affluent is a worthwhile and desirable objective.

## **B. THE FUTURE OF CATHEDRAL CITY**

It is common to describe the future of a City in terms of land uses, highway patterns, public facilities and similar dimensions of physical development. Later sections of the Plan will do that.

This section focuses on the future of Cathedral City as a whole in terms of function, growth and time.

### **1. FUNCTION**

People readily acknowledge that all cities are not the same even though certain features are common to most of them: houses, streets, businesses, schools and many other such improvements. Cathedral City will have all the standard features we associate with suburban communities. But the combination and proportion represented in this Plan reflect a certain function performed by Cathedral City not typical of most of the nearby communities. Some of those are resort communities whose dominant function is to serve and protect the interests of part time residents and tourists.

Others are retirement communities designed to serve primarily an older population. Still others are wealthy, single family enclaves aimed at protecting a certain lifestyle and living environment.

This is not to say that one is right and the other is wrong. They are simply different.

Cathedral City's function is diversity.

This may be called, as it is on the City's seal, "A City in Perfect Balance". The City will consist largely of family-oriented year around residential neighborhoods, but with some resort residential development. There will be



very affluent neighborhoods but the majority of the City's dwelling units will be occupied (many owned) by moderate or lower income residents. Businesses will cater in part to City residents, in part to consumers throughout the valley and in part to a variety of tourists. Although tourist accommodations will vary in cost, they will generally appeal to those who either don't want or can't afford the more exclusive tourist facilities. The jobs in Cathedral City will be provided by retail, general commercial, office, tourist commercial and light industrial business enterprises.

The common thread running through this diversity, or balance, of activities is that it makes access to a very desirable desert environment possible for people who otherwise could not afford it. In addition, it will provide a residential environment for those employed in adjacent cities who cannot afford to live locally. This "service" to the region will be afforded by the commercial and tourist generated revenues pulling from the regional market.

## 2. GROWTH

The City will continue to grow in three ways: 1) by new development on vacant land now within the City; 2) by redevelopment of existing development as its economic value justifies a change in use; and 3) by expansion of the City boundary to take in County territory or land detached from adjacent cities.

The General Plan proposes patterns of use for all three categories of growth but does not propose uses for all the territory that may eventually be annexed.

The City is fortunate in that it has extensive vacant acreage as well as subdivided lots. Property in acreage can be planned as a unit by means of a Specific Plan, resulting in creative development solutions. At the same time, smaller scale development will occur on individual or clusters of "infill" lots, responding to different markets and involving much smaller front end costs. Meanwhile, redevelopment projects of various scales may proceed on still a different pace.

The result of multiple paths to growth and development is not only a community of diversity but one which avoids complete dependence upon one form of growth to sustain its vitality. Moreover, the natural staging of growth prevents a situation in which major segments of the community "wear out" at the same time, thus spreading the rehabilitation/redevelopment burden over time.



### 3. TIME

It is important to recognize that some aspects of this Plan will cause changes in a relatively short time; others will require many years for completion.

There are many ways to define short term and long term. For purposes of this Plan, short term is considered five years or less; long term is defined as up to 20 years. The short term period of five years is useful because it can be tied to a typical 5-year Capital Improvement Program, updated annually as part of the budget process. The long term period is useful because it provides a reasonable period within which to visualize major changes and its cumulative impacts.

These time periods also encompass the target years used by Riverside County and the Southern California Association of Governments in their adopted growth forecasts (1985, 1990, 1995, 2000). This is important because Cathedral City will need to be in a position to influence those forecasts in the future to help reinforce its strategy for growth and development.

State law now requires a review and adjustment of the housing portion of this General Plan at least every five years. It permits amendment to the major Plan elements a maximum of three times per year. Thus, the Plan will evolve and change more or less continuously, but a major review is probably in order every five years. This time period would allow a reasonable reassessment of the Plan and progress towards its implementation.

The implementation programs contained in this Plan are particularly sensitive to time requirements. Distinctions are made between short term and long term actions so the City Government and its residents will be able to maintain reasonable expectations about the accomplishments of implementation actions the City decides to undertake.

### 4. GOALS

It takes a long time to build a city. Many shifts in priority and changes in circumstance intervene between the initial setting of direction and the complete buildout of the city. In fact, owing to the more or less continuous process of redevelopment as a place matures, final development is a constantly moving target. The city never really stops evolving.

What, then, provides continuity during this long process? This plan contains a few basic goal statements that will hopefully remain intact as the city evolves and lend continuity to the city's growth.



Goals are simply general statements of desired future condition toward which effort will be directed. Because they are general, progress toward them can only be measured in approximate terms. They tend to be encompassing enough so that there is usually little disagreement with them. Yet, they constitute the basic rationale for everything contained in the Plan. All of the objectives expressed in the Plan as the basis for policies and programs are derived from one or more of the goals.

The following goals represent the philosophy upon which the future of Cathedral City will be built:

- a. It is a goal of the General Plan that Cathedral City will be an attractive community with a positive sense of identity.
- b. It is a goal of the General Plan that Cathedral City's transportation system will be efficient, environmentally acceptable and not congested.
- c. It is a goal of the General Plan that housing in Cathedral City will be open to a broad range of buyers and renters, varied in architectural style and density, and benefited by a pleasant living environment.
- d. It is a goal of the General Plan that the public facilities supporting Cathedral City's development will be safe, convenient, efficient and involve minimum expense.
- e. It is the goal of the General Plan that Cathedral City's economy will be strong, stable and balanced in support of the City's growth and development.

## C. ORGANIZATION OF THE GENERAL PLAN

### 1. STRUCTURE

The General Plan is divided into four major parts, indicated by Roman numerals in the table of contents: I. The Foundation; II. The Community Development Component; III. The Environmental Management Component; and IV. The Implementation Component. The rationale for this way of dividing up the Plan is simple: first, you decide what existing features and future potentials are most important and establish a basis for the Plan (Foundation); second, you determine what growth and development should occur as well as what areas should not be developed and prepare a Plan for managing City's growth (Community Development Component); third, you combine those resources to be conserved or preserved with quality, safety and convenience expectations into a Plan for achieving the desired environmental quality (Environmental Management Component); and fourth, you describe the actions to be taken to carry out the Plan (Implementation Component).



The Foundation contains a brief overview of existing conditions, how they occurred and what the anticipated future of the City will be.

The Community Development Component describes: 1) the major features that will give the City form and shape; 2) the basic ingredients making up the urban living environment that will gradually be built; 3) the economic development that will help finance all the other things the community wants and, 4) the physical systems needed to support the proposed development.

The Environmental Management Component describes: 1) those resources that are essential to the long term health and welfare of the community and how they can be managed; 2) those aspects of the City needing attention in order to achieve safe and convenient functioning of the community and, 3) special conditions requiring particular attention.

The Implementation Component describes content, responsibility and timing of actions to carry out the Plan.

Within each major heading under the Community Development and Environmental Management Components (denoted by capital letters) there is a statement of existing conditions and trends which are most directly related to the particular subject. This insight was obtained during the research and analysis phase of the City's general planning program and augmented during preparation and review of the draft Plan. A general statement of needs follows, based primarily on issues identified early in the planning process. Related objectives developed as party of the early phase of Plan preparation rounds out this level of the Plan. Taken together, these points set the stage for specific subjects that really define the scope of the Plan.

Each subject (indicated by numerals in the table of contents) generally includes three ingredients: 1) Opportunities; 2) Policies; and 3) Programs. Opportunities are derived from an analysis of relevant existing conditions, trends, and issues. Policies are statements of the official positions the City takes on the subject. They indicate the City's intent to make certain things happen. Programs are brief descriptions of actions the City will take in carrying out the stated policies. As previously discussed, these may be short term actions, long term actions or both. The Plan's complete action program is summarized in the Implementation Component.

The single deviation from this pattern is found in the Housing section of the Plan. Because the State Planning and Conservation law is so explicit about how to write this element of the Plan, there is an extensive and somewhat detailed analysis of need not found in other sections of the Plan.



## 2. MANDATORY ELEMENTS

The California Government Code requires that certain subjects be contained in City General Plans to the extent that they apply to a particular jurisdiction. These subjects are referred to as elements of the General Plan. They include:

- Land Use
- Circulation
- Housing
- Open Space
- Conservation
- Public Safety
- Seismic Safety
- Noise
- Scenic Highways

In addition, the law permits any other subject to be included in the Plan which relates to the City's physical development.

All of the mandated subjects and several optional subjects are adopted and most are included in this Plan, although they are not labeled as "elements". Those topics which are equivalent to or contain mandated elements are noted by an asterisk in the table of contents and summarized below.

Three elements are not contained in this General Plan document because they were previously adopted in the form of County of Riverside elements enacted by reference. These include: Public Safety, Seismic Safety and Scenic Highways. A fourth element, Housing, is included in draft form pending final revisions and review by the State Department of Housing and Community Development. In the meanwhile, the County of Riverside Housing Element, adopted by reference, shall be in effect.



The following list summarizes the location or potential location of mandated General Plan subjects in this document:

<u>Mandated Subject</u>	<u>General Plan Section</u>
Land Use	Section II.B.1. - Land Use Component
Circulation	Section II.D.1. - Transportation System Component
Housing	Section II.B.2. - Housing Component
Open Space	Section II.A.4. - Open Space, Conservation and Recreation Component
Conservation <sup>1</sup>	Section II.A.4. - Open Space, Conservation and Recreation component.
Public Safety	Section III.B. - Community Safety and Convenience (County element: not included)
Seismic Safety	Section III.B.1. - Geology Hazard Component: County element
Noise	Section III.B.4. - Noise Component
Scenic Highways	Section II.A.9. - Urban Design Component

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<sup>1</sup> Note: The Conservation element was prepared by the City staff and is incorporated as adopted by the City Council.



### 3. GENERAL PLAN GUIDELINES

The California State Office of Planning and Research (OPR) in the Governor's office publishes very helpful guidelines on General Plan preparation. The guidelines are intended as aids in Plan preparation, not regulations to be strictly followed. The guidelines recognize, as does the law, that not all communities are the same, nor should they be. Consequently, certain subjects are dealt with in considerable depth, while others receive a more general treatment as appropriate to the character and needs of the community. So long as the necessary subjects are included, the guidelines suggest considerable flexibility in the structure and format of the General Plan. In particular, the idea of clustering related subjects together in a single, composite "element" is encouraged where that approach makes sense.

The scope of this Plan is consistent with the requirements of the Government Code and follows the principles outlined in the OPR 1980 General Plan Guidelines.







**II.**

**COMMUNITY DEVELOPMENT  
MANAGEMENT PLAN**







## A. COMMUNITY STRUCTURE

The community structure section of the General Plan conveys an understanding of the basic physical form and shape of the City as well as how the City is intended to function. It is depicted on Exhibit 3. This understanding is fundamental to the eventual achievement of a sense of place for residents and visitors. It is also necessary to an appreciation for the way in which the City and its parts work together.

This section includes six components. They are subjects which most help to shape the overall physical form of the City and contribute to a perception of that form. They tie the City together and, at the same time, help to reinforce its diversity. The components include:




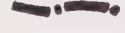






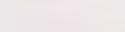


- o Community Sectors - Portions of the City which have certain unique characteristics or potentials;
- o Activity Centers - Areas in which intensity of development and activities of people are particularly pronounced;
- o Freeway and Major Arterials - Transportation routes that form the backbone of the City's means of moving people and goods as well as being chief visual corridors;
- o Open Space - Interruptions in urban development by natural or artificially established spaces which lend character, relief and definition to urbanization;
- o Urban Design - Ways of treating the other aspects of community structure to help them fulfill their functions more satisfactorily;
- o Scenic Corridors Component - Delineates specific transportation routes within the City in order to preserve and enhance aesthetic scenic features.

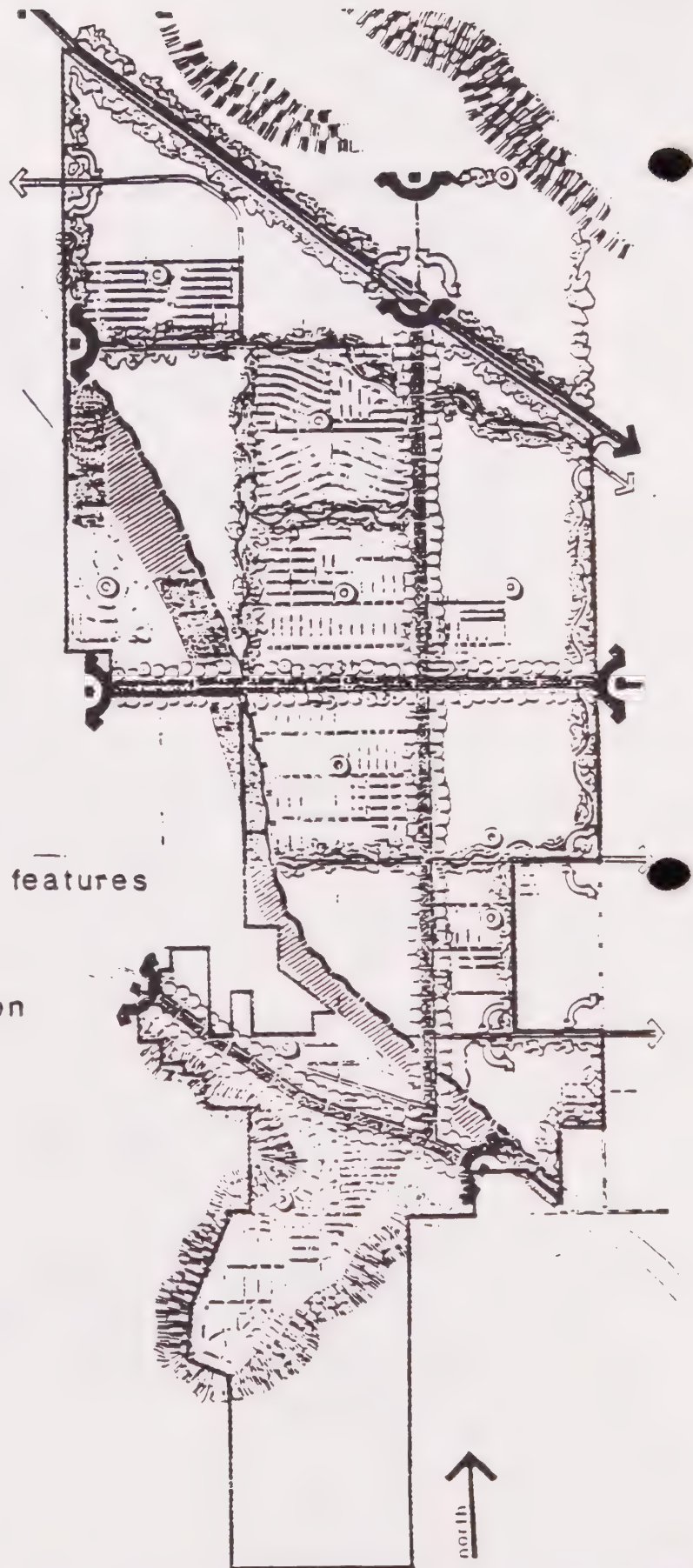
The community structure is a way of looking at or thinking about the entire City. In that sense it involves all parts of the General Plan. However, it really consists of a broad overview which states the organizing logic upon which the more detailed portions of the plan are built. It is the "framework" into which the rest of the plan and the community it tries to shape will fit.



# COMMUNITY STRUCTURE

## Legend

-  Interstate 10
-  Circulation backbone
-  Community collector
-  Major trail system
-  Support trail system
-  Enhanced parkways
-  Community definition features
-  Public recreation
-  Commercial recreation
-  Primary entrance
-  Secondary entrance
-  Park/School
-  Mountain backdrop



# CATHEDRAL CITY GENERAL PLAN



## 1. COMMUNITY SECTORS COMPONENTS

### a. Scope

This component identifies areas within the City and its sphere of interest in which somewhat unique conditions generally prevail. These differences are significant enough that they need to be recognized in the General Plan and subsequent development regulations.

Sectors are primarily distinguished from each other by similarities in the character of development that prevail within each one. Some sectors are similar in this respect and are distinguished from each other because of separate physical locations. However, each one tends to have a somewhat unique set of planning and regulatory requirements.

There are ten community sectors, each identified with a name as shown on Exhibit 4.

### b. Existing Conditions

South View is totally undeveloped and consists largely of steep slopes, sharp ridges and narrow valleys. This area forms most of the southern backdrop for the City.

Cathedral Canyon, Date Palm and Dream Homes contain most of the existing development in Cathedral City. These sectors are predominantly built out, although there are some vacant parcels and subdivided lots.

Cathedral Canyon consists of the business development south of the Whitewater Wash and generally along the Highway 111 corridor. It also contains the largely subdivided and residentially developed cove.

Date Palm is characterized by a mixture of mobile home developments, portions of the Cathedral Canyon Country Club, a variety of commercial uses, a wide range of single family residential environments and scattered multiple family uses.

Dream Homes includes the largely developed neighborhood by that name and adjacent commercial and multiple family developments north of Ramon Road.

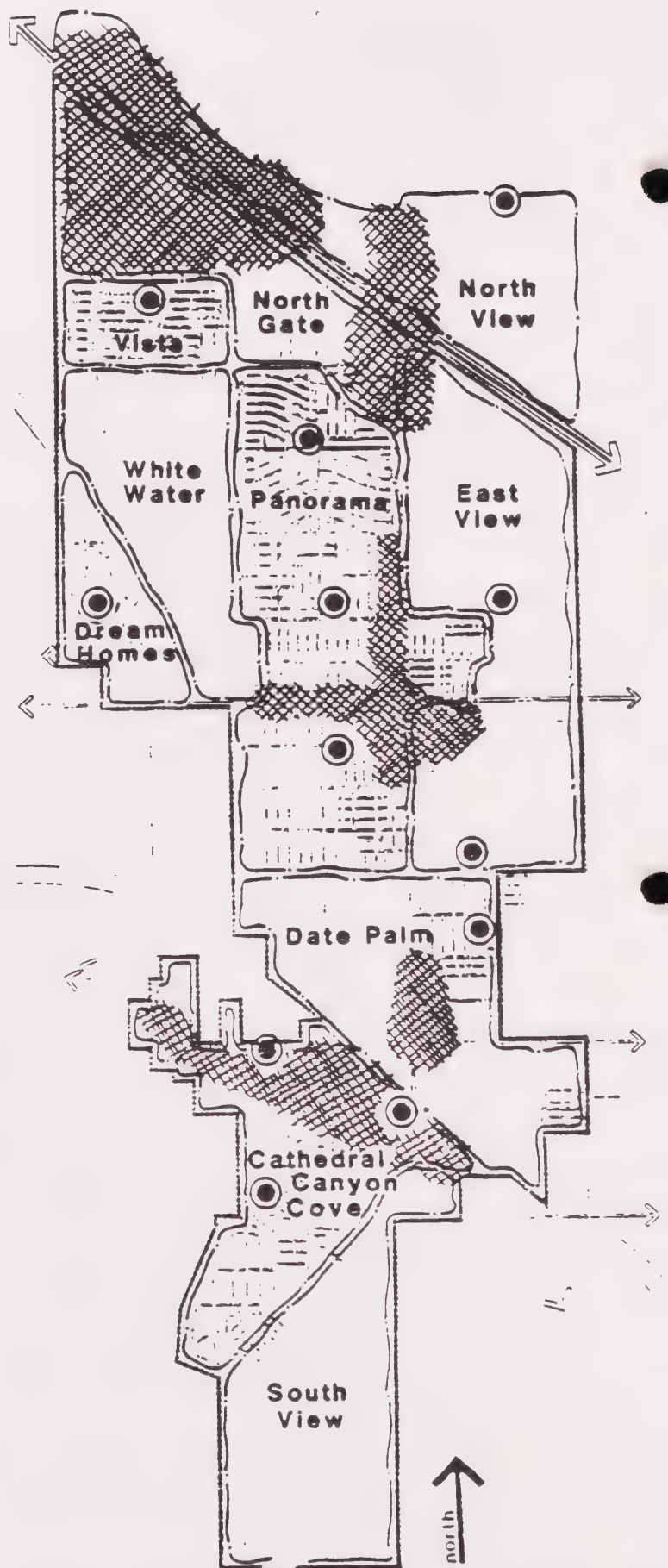
Panorama and Vista are characterized by almost completely subdivided but sparsely developed single family tracts. Existing development is primarily single family in character, but some lots are devoted to multiple family and even commercial uses.



# COMMUNITY SECTORS/ ACTIVITY CENTERS

## Legend

- Neighborhood activity centers
- ▨ Community activity centers
- ▭ Community sectors



# CATHEDRAL CITY GENERAL PLAN



Panorama is the largest continuous area of sparsely developed subdivided land, extending from Gerald Ford Drive on the south all the way to Vista Chino on the north. The proportion of developed parcels generally diminishes to the north.

Vista lies to the northwest of Panorama and is relatively more completely developed. It is also uniformly single family residential.

Whitewater and East View consist of generally vacant acreage in the mid-section of the City. Although they are interspersed with some existing development, most of the land can be planned and developed in a carefully designed, integrated fashion.

Whitewater lies between the Whitewater River and the subdivided expanse of Panorama and Vista. Most of it consists of a single parcel slated for resort residential development.

East View lies adjacent to the City of Rancho Mirage and, except for some scattered development, offers the largest concentration of planned development potential within the present City boundary.

North Gate contains completely vacant land on the south side of the Interstate 10/railroad corridor. It offers industrial, commercial and resort residential potential. It has direct rail access.

North View consists of industrial, commercial and residential potential just outside existing City boundaries and adjacent to a larger sphere of interest of unspecified land use potential. The sector includes the sand hills forming the northerly backdrop for Cathedral City.

#### c. Needs

South View is almost totally without public facilities and services. Access is very limited. The very limited development potential for this area requires little improvement in public services. Methods of preserving the natural aspect of this area will be the greatest challenge.

Cathedral Canyon, Date Palm and Dream Homes include the greatest diversity in terms of quality of development and mix of uses. Cathedral Canyon contains the City's only designated redevelopment area. The outstanding need in these sectors is to stimulate effective renewal and rehabilitation along with sensitive new infill development that can serve as a



catalyst for general upgrading in those areas where deterioration is occurring.

Serious circulation deficiencies in the Highway 111 corridor circulation pattern need correction. Where quality development exists, it needs reinforcement in order to preserve its value.

Panorama and Vista are in many ways the most challenging. The overwhelming need in this area is to find ways of living with the pattern of existing lots without creating a chaotic mess. Very creative development standards and incentives will be needed. Considerable refurbishing of existing public improvements and protection from blow sand will be required. These areas are almost totally deficient in sewer availability.

Whitewater and East View are mainly in need of detailed development planning and phasing of public improvements, particularly new arterial highway extensions and realignments. Blow sand protection is also critical here.

North Gate and North View have similar needs and deficiencies as do both Whitewater and East View. Two additional needs apply to North View: 1) the area or areas to be annexed into the City must be determined and 2) sphere of influence and actual annexation approval must be accomplished with the Local Agency Formation Commission in order for City development policies to prevail.

d. Opportunities/Constraints

The major opportunity in South View is that it is totally unplanned, undeveloped and unserved by public facilities. This reinforces its value as a natural backdrop to the City -- an important function to be preserved. Two constraints exist: 1) the need to afford some use to private land owners that still permits large scale preservation of natural features, and 2) a means of providing access for both public and private purposes.

The major opportunity in Cathedral Canyon, Date Palm and, to a lesser extent, Dream Homes, is the dominant existing economic activity there which stimulates value, leading to further development. The redevelopment area in Cathedral Canyon is a powerful tool now that the redevelopment plan has been adopted. Inadequate circulation and complications of somewhat conflicting, unplanned mixed uses are the main constraints.



The opportunities in Panorama and Vista consist of existing improvements (streets, water lines) and potential flexibility in development scale afforded by differences in ownership patterns from one lot to many. At the same time, the existing subdivision lot patterns constitute a major constraint in overall planning and phasing of development.

Whitewater, East View, North Gate and North View all share the same opportunity: large acreage that can be planned according to the City's General Plan. Constraints include incomplete or inadequate public facilities (particularly arterial highways) and, in the case of North View, location in unincorporated territory.

e. Objectives, Policies and Programs

Based on the foregoing discussion the following objectives are stated as desired further conditions toward which the Plan is directed. Policies and programs are specified to achieve the objectives.

- 1) Objective: Community sectors will have distinct local identity yet fit into the Citywide fabric.

1.1 Policy: The City will encourage visual means of achieving community sector identity.

1.1.1 Program: Establish sector name identity through City mapping and signing.

1.1.2 Program: Develop landscape programs which allow some localized variation where local identity can be reinforced.

1.1.3 Program: Whenever possible, reinforce sector identity through design of public improvements.

- 2) Objective: Development and related standards will be tailored to individual sector needs rather than being uniform citywide.

2.1 Policy: The City will provide and allow for regulatory variation among the various community sectors.

2.1.1 Program: Write zoning districts to recognize sector variations.



### 2.1.2

Program: Write overlay districts for development standards such as setbacks, height limitations, lot sizes, etc., to permit variations from sector to sector.

## 2. ACTIVITY CENTERS COMPONENT

### a. Scope

This component of the Plan emphasizes the points in the City where concentrated uses and higher levels of activity are intended to occur. This includes focal points at both citywide and neighborhood scales.

At the citywide scale activity centers are typically employment centers: commercial, business park or industrial complexes. They may be reinforced by higher density residential uses or public buildings (such as a civic center). They are nodes or concentrations at key arterial highway intersections or, in some cases, along segments of major routes. They provide basic support for the residential environment.

At the neighborhood scale activity centers are typically schools, parks, neighborhood shopping centers, churches, clubhouses or other use of primarily a localized nature. They typically are not located on major circulation routes but rather, internally on collectors which tie neighborhoods to the arterial system. These centers provide supplementary support for the residential environment.

Activity centers and neighborhoods complement community sectors but they are not the same. Activity centers are physical concentrations that differ from what is around them. They stand out on the Plan and on the ground after they are built. Community sectors are defined more by common conditions, circumstances or potentials which give an entire area a certain quality or identity. A sector may contain all or portions of citywide activity centers as well as one or more neighborhood centers.

Only so much activity can be sustained by a community. The value of having viable centers rather than dissipating activities randomly along arterial highways is that this pattern functions much more efficiently and effectively as well as providing considerably greater visual interest.



b. Existing Conditions

There is a natural tendency for centers to evolve, spread and eventually merge with others or change form entirely through redevelopment. This is happening in Cathedral City.

The dominant existing activity center is not a center at all, but a narrow corridor along State Highway 111, consisting mainly of retail commercial uses and a light industrial/office complex along Perez Road.

A secondary center is evolving at Date Palm Drive and Gerald Ford Road. Random, non-center strips of activity are scattered along Date Palm Drive and Ramon Road. Zoning patterns lead toward actual centers at some key intersections if strip activity does not sap the economic energy to allow these centers to occur and be successful.

Limited neighborhood centers exist in the form of schools and local parks. In some areas the facilities have fallen so much into disrepair or the pattern of development is so sparse (or both) that the activity center function is not being performed even though the potential exists.

c. Needs

The major need is to focus both public policy and private investment/reinvestment on development of the planned activity centers. In some cases (particularly the Highway 111 corridor) this includes both in-fill development and redevelopment. A sense of cohesiveness must be achieved through a combination of design/landscape continuity and gradual transition of uses on under-utilized parcels. All planned centers at the citywide scale require some degree of arterial circulation improvement.

Neighborhood scale activity centers either need to be refurbished where they exist or planned where they do not exist.

The activity centers are now deficient. They are inadequately served by highways and other public facilities, are very incompletely developed in terms of their eventual character of development and are not sufficiently distinct as real centers. This is because of their stage of development, competition by nearby strip commercial uses or both.



d. Opportunities/Constraints

With the exception of the Highway 111 corridor, areas proposed for citywide centers are sufficiently undeveloped to allow their evolution according to the General Plan. Some constraints do exist because of inadequate public facilities and market erosion by strip commercial development.

In the case of the Highway 111 corridor, the entire area constitutes a "center", albeit a somewhat elongated one. The opportunity is for redevelopment to eventually give this area a different character with perhaps distinctive subcenters emerging. There are opportunities to achieve these changes in part because of recent private new development serving as a catalyst, in part because of the City's redevelopment plan and in part because of the substantial forthcoming improvements in Highway 111 scheduled by the State of California.

e. Objectives, Policies and Programs

Based on the current conditions, needs and opportunities related to activity centers, the following objectives are established as desired future conditions. Policies and programs are specified to achieve the objectives.

- 1) Objective: Functional community focal points will occur at appropriate arterial intersections with access to through traffic and convenience to residential neighborhoods.
  - 1.1 Policy: The City will use its powers to bring about the adopted citywide activity centers.
    - 1.1.2 Program: Prepare Capital Improvement programs which give priority to serving activity centers.
    - 1.1.3 Program: Develop a project review process which enables the City to avoid further market erosion of center potential through scattered uses.
    - 1.1.4 Program: Set up priorities for redevelopment area establishment as a tool to stimulate activity center development.
2. Objective: Schools, parks and other public/private facilities are located to serve as neighborhood focal points.



2.1 Policy: The City will encourage the establishment of neighborhood activity centers.

2.1.1 Program: Write zone code and subdivision regulations which provide for neighborhood activity centers.

2.1.2 Program: Include local activity center establishment in the Capital Improvement Program.

2.1.3 Program: Coordinate future school locations with the Palm Springs Unified School District so sites, to the extent needed, will function as neighborhood centers.

2.1.4 Program: Use redevelopment area powers for assistance in establishing neighborhood centers.

### 3. FREEWAY AND MAJOR ARTERIALS COMPONENT

#### a. Scope

This section of the Plan deals with the ways in which the freeway and major arterials form a component of the community structure. In any community the major circulation routes form a skeleton upon which land use development and activity centers are built. In fact, the major arterials provide the framework upon which the entire community is spatially oriented.

The arterials also serve as major identity elements within the community providing visual corridors, entries to the City and linkages between the community and areas outside of the City.

#### b. Existing Conditions

Cathedral City is providing regional access by way of U.S. Interstate 10, a six lane freeway which traverses the northern limits of the City. A freeway interchange exists at Date Palm Drive. State Route 111, an arterial highway, bisects the City near its southerly limits. Both the freeway and Highway 111 are east-west routes which provide access to surrounding communities as well as regional access. Ramon Road, an arterial highway also provides an east-west route through the central portion of the City and provides connections to adjoining cities. Date Palm Drive is a north-south arterial highway providing the only intracity connection from I10 to



Highway 111 and the only connection between the northerly and southerly portions of the City.

Although these major circulation corridors are not totally responsible for the existing physical form of the City, they have influenced the growth and form of the City and will continue to do so in the future. The Highway 111 corridor has been the focus of past development in the City and has resulted in not only an east-west corridor of development but a general concentration of development in the southerly portion of the City.

Date Palm Drive has provided some impetus for growth northerly along the Date Palm corridor but this growth still has been largely concentrated in the southerly portion of the City. The construction of I-10 and the access interchange at Date Palm Drive has provided new impetus for development northerly along Date Palm towards I-10, but as yet development in the northerly portion of the City is largely unrealized.

c. Needs

Community structure is largely a function of the major arterial routes. This is certainly true in Cathedral City where past development has been concentrated along Highway 111. Cathedral City has developed as a linear city along Highway 111, incrementally northerly along Date Palm Drive and randomly along Ramon Road. Much of this growth has occurred in a haphazard fashion without proper control of access and in a leap-frog fashion. This is particularly true of Date Palm Drive and Ramon Road.

The City needs to control the location and intensity of development along the arterials if it wants to capitalize on the development framework these arterials provide. Development control along arterials is also needed to enhance them as major visual elements of the community and as traffic carrying corridors. Such control may require urban design, landscape and particularly access control.

An important issue is the traffic carrying capacity of major arterials. As the City grows in the future, these arterials will provide vital circulation links both within the City and as connections to surrounding areas. Deficiencies in traffic capacity can create a negative image of a congested community and interfere significantly with its economic prosperity.



Special standards for development along major arterials and the freeway need to be developed to ensure a positive community image for these routes as major elements of the community structure.

d. Opportunities/Constraints

The major arterials and the freeway provide an opportunity to tie together the various elements of the community structure. These elements include the community sectors, activity centers, open space features and major land use components. The freeway location at the northerly end of the City, Ramon Road through the central portion of the City, and Date Palm Drive tie these corridors to the Highway 111 corridor providing an excellent opportunity to redirect the focus of development within the community from the southern portion of the City to the central and northern portion of the City. Such a redirection can result in a more spatially balanced community along the north-south Date Palm Drive axis. It can also result in a shift of the activity center of the City away from the congested Highway 111 corridor to the Ramon-Date Palm or I-10-Date Palm area of the City so that a planned pattern of focal points can be developed.

Providing development controls along the major arterials can also result in the development of special street sections and landscape treatments which will enhance their function as community identity features. The opportunity for access control in newly developing links of the arterials will reinforce their special identity and function. However, areas where multiple direct access points exist will act as a constraint to the traffic carrying function of these routes and may tend to detract from their special identity status.

e. Objectives, Policies and Programs

Based on freeway and major arterial conditions as well as the needs and opportunities outlined above, the following objectives are established as desired future conditions towards which the Plan is directed. Policies and programs are also identified to provide maximum achievement of land use objectives and opportunities.

1) Objective: Activity centers and land use intensification will occur along the major arterial network.

1.1 Policy: The City shall promote the Date Palm Drive, Ramon Road, and I-10 corridors as locations of development intensification.



park sites are proposed to be developed. A conservation and open space concept has been included as a part of the existing conditions analysis. It should be noted as well that the terms "open space" and "conservation" are similar in concept. The State Law encourages communities and counties to develop these elements in concert with one another so that natural features and public facilities can be combined to preserve and enhance the area. It is intended that this component will be a major policy tool to be integrated with the land use and circulation elements. Its concerns relate directly and, in fact, overlap many of those concerns and issues related to open space, recreation, public facilities, urban design and scenic highways.

c. Needs

Open space performs a number of vital functions in an urban environment. It provides relief from monotonous and unattractive development. It adds a pleasant setting for urban activities. It can serve as a buffer between incompatible land uses. It can establish or form edges to communities or neighborhoods, and it provides opportunities for recreational places and activities.

Consideration of the conservation aspects of this component include an awareness of the existing natural environment, i.e., the existing mountains and Whitewater Stormwater Channel, to act as a major structuring factor in the development of the City. The protection and preservation of habitats and ecosystems of existing natural areas could also be part of the evaluation and developmental criteria.

While it is difficult to document in quantitative terms, there is a generally recognized acceptance in City planning that there is true need for these functions to be performed in a well balanced community. From the standpoint of recreation needs, there are again generally rules that enjoy common acceptance. One is that local/community park land should be provided on the basis of two to four acres of park land per thousand population.

In this community the lower range of 2 acres/thousand is proposed. The reasons for this include: 1) the availability of existing school sites; 2) the relatively low family size with fewer children per household (this population segment accounts for a high proportion of local recreation facility use); 3) the seasonality of typical park use in desert areas; 4) the desire to keep financial burdens on existing and future residents for public purposes to a minimum;



and 5) the fact that high proportion of new development on un-subdivided land will be of a private resort community character.

On this basis, eventual local/community park needs will be approximately 94 to 130 acres, depending upon the level of development actually achieved. The main need is for an expanded park site acquisition and development program to insure that a reasonable standard is maintained.

In addition to park sites, a pedestrian, bikeway and limited equestrian trail system is needed to serve both recreation and transportation functions.

d. Opportunities/Constraints

The open space, conservation and recreation concept for Cathedral City is oriented to both urban amenities and large natural open space areas. The intent of this element of the Plan is to establish a system of open space features, parks and trails within the City which will complement and supplement the existing environment. This system is an integral part of the "structure" of the community and provides a set of linkages between the land use areas, or neighborhoods, of the Plan (see Community Structure Exhibit) and those aforementioned natural areas such as the mountainous areas on the south boundaries of the City.

Open space areas within the Plan are primarily of linear nature, with the exception of the mountainous areas previously described, and are located along vehicular routes, existing windrows and the Whitewater River. These features form an important element of the Plan structure in several ways: first, they are strong visual elements in the Plan that provide visual relief to the basically flat topography of the desert; second, they provide linkages between neighborhoods and communities of land uses; and third, they form, in some areas, an edge treatment to the City, thus providing a sense of identity upon entering or leaving the City.

It should be noted that there is a constraint affecting the Whitewater River: large portions of it are in private, not public, ownership. This means that open space and/or recreation uses will be both private and public in nature, with the distribution influenced largely by current ownership patterns. However, since this area is subject to periodic severe flooding and is inappropriate for most kinds of development, it can usefully augment adjacent private development with open space/recreation/flood control uses.



Property configuration constraints also make park development in existing subdivided areas more difficult as well as more costly. It may be necessary to achieve needed acreage in small, multiple sites (combinations of lots) in certain neighborhoods.

Recreational uses proposed by the Plan consist of four basic components -- neighborhood parks, community-wide facilities, trail systems, and private recreation facilities. Neighborhood parks are proposed in each section of land which is primarily devoted to residential uses.

School/park combinations are encouraged. These facilities should be located near the center of residential neighborhoods to facilitate ease of access.

Community-wide recreational facilities are planned for locations along the Whitewater River in areas where access from the trail systems and arterial highways is available. Special facilities should be planned and designed in concert with the Water District to provide for recreational needs which cannot be met through the neighborhood parks.

The Community Trail System consists of a major trail system along the Whitewater River and a support trail system which is located on the arterial highway system and within the lineal open space system. The major trail will consist of facilities for equestrians as well as bicycle riders and pedestrians. The support trail system will be limited to pedestrians and bicyclists.

The system is designed to link development areas within the City, as well as to connect the open space and recreational features of the community.

Private recreation facilities may be provided within many of the residential areas, particularly in the higher density developments and the resort residential areas. These facilities will be provided by individual builders for use by residents of the respective developments in which they are included. These recreational areas essentially should augment the neighborhood and community park system and should be tailored to the needs of the residents within the respective development. Private recreational facilities might include golf courses, tennis clubs, pools, spas, recreation buildings and other similar facilities.



e. Objectives, Policies and Programs

In order to preserve and protect the open space resources and enhance the recreational opportunities in the City, the following objectives, policies and programs should be implemented:

1. Objective: Significant open space and natural features will be permanently preserved for aesthetic, recreational and identity purposes.

1.1 Policy: The City will require preservation of significant open spaces and natural features such as mountains and watercourses.

1.1.1 Program: Regulate the amount and type of development in designated open space areas through the provisions of this General Plan and zoning regulations.

1.1.2 Program: Encourage intergovernmental cooperation in the planning and development of programs to achieve conservation of natural resources to enhance this asset throughout the valley.

1.1.3 Program: Develop a cooperative arrangement with the Flood Control District, Water District and others, as appropriate, to preserve and conserve open space areas.

1.1.4 Program: Conduct annual budget studies to identify priority areas for preservation action.

1.1.5 Program: Develop design criteria, landscape concepts, signing regulations and other standards to enhance and protect open space.

1.1.6 Program: Develop standards, criteria, regulations and incentives to achieve strengthened community identity and image by use of open space features.



- 1.1.7 Program: Provide sufficient open space to protect the public health, safety and general welfare from seismic, noise, water pollution, erosion and flood hazards.
- 1.2 Policy: The City requires open space approaches that are compatible with and enhance the desert environment.
  - 1.2.1 Program: Develop landscape standards and lists of approved desert landscaping materials for open space and landscaped areas.
  - 1.2.2 Program: Develop standards and incentives for drip irrigation systems for both public and private application.
- 1.3 Policy: The City will cause recreational facilities, schools and other public facilities to be located as focal points for neighborhoods.
  - 1.3.1 Program: Develop design standards and locational criteria to guide the placement of recreational facilities throughout the City.
- 1.4 Policy: The City will secure the provision of recreational, cultural and social opportunities to meet the needs of the residents of the City.
  - 1.4.1 Program: Conduct research of the recreational needs of the residents of the City and establish standards and criteria for the provision of recreational facilities.
  - 1.4.2 Program: Prepare an ordinance and project review process to secure park lands or fees in lieu thereof from new development projects.
  - 1.4.3 Program: Establish assessment districts for each community sector for the purpose of funding park acquisition or improvement budgets.



1.5 Policy: Preserve and enhance the quality of life for present and future generations by preventing misuse and degradation of natural resources.

1.5.1 Program: Designate and maintain appropriate natural areas in their undeveloped state at both the citywide and neighborhood levels.

1.5.2 Program: Establish criteria to evaluate development proposals, making sure that the criteria contains the flexibility necessary to recognize design and terrain uniqueness of a particular site.

1.5.3 Program: Establish guidelines for protection and preservation of the habitats and ecosystems of existing natural areas.

## 5. URBAN DESIGN COMPONENT

### a. Scope

This component provides direction in the aesthetic treatment of significant urban features in order to achieve an improved community image.

### b. Existing Conditions

Areas of Cathedral City are old, poorly planned and in need of rejuvenation. The City has an image of a community with considerable substandard development and the pattern of development is random. It does not represent orderly growth and development. There is a general feeling throughout the community that the appearance of the City does not properly reflect the predominant values and attitudes of its residents.

### c. Needs.

Since the City has lacked, almost totally, any urban design standards in the past, the opportunities and needs to enhance the image of the City are great.

It should be noted that positive design treatment need not be extravagant nor unduly costly. This is important because the direction established by the City's leadership is to avoid unnecessary costs for development. Yet, some quality design applied to the actual development responds to a need for 1) a sense



of place; 2) community pride; 3) protection of both private and public investments; 4) prevention of a spread of deteriorating conditions; and 5) stimulation of the economy.

d. Opportunities/Constraints

Cathedral City is a mixture of the old and the new. There is a character to the community which can be enhanced through appropriate design guidelines and there is an opportunity to guide new development in a way which will create a desired image for the City.

This mix of old and new provides an opportunity to achieve an interesting diversity not possible under different circumstances. At the same time, much of the older development, particularly in the old downtown, will require difficult design rehabilitation in order to achieve effective results.

The basic "shape" of the community is already established by the large extent of existing subdivision of both developed and vacant land as well as the dominant street pattern. Nevertheless, design techniques can eventually make a difference in the visual aspect of the City.

It is the intent of the urban design component of the General Plan to create a design framework for the City which will lead to a desirable image and character, a character which creates a statement for the City "as a whole". This design framework should be present in areas of the City where continuity is desirable (i.e., main entries, pedestrian and vehicular corridors, commercial areas and public places), and it should address landscape concepts, signing standards and building design criteria.

Standards should be flexible to allow for diversity in design and freedom of expression, but at the same time ensure community wide identity. This flexibility can be achieved through the community sectors identified on Exhibit 4. Any design criteria, regulations or enhancement programs should avoid undue control over private property and involve reasonable costs for compliance.

The Community Structures Exhibit (exhibit 3) illustrates locations in the City where urban design considerations are most important, i.e. enhanced parkways, community definition areas, primary entry points and secondary entrances.



e. Objectives, Policies and Programs

In order to enhance the image of the community and create a more attractive environment for living, working, shopping, and recreating, the following objectives, policies and programs should be implemented:

- 1) Objective: Community identity, efficiency and liveability will be improved through appropriate urban design standards.

- 1.1 Policy: The City will require adherence to certain community-wide design guidelines.

- 1.1.2 Program: Regulate the use of signs, billboards and other outdoor advertising devices through the adoption of a sign ordinance.

- 1.1.3 Program: Regulate the setbacks, height and bulk of buildings through the provisions of an updated zone code.

- 1.2 Policy: The City will stimulate visual diversity as appropriate to the various sectors of the community.

- 1.2.1. Program: Establish special corridor treatments for Highway 111, Date Palm Drive and Ramon Road.

- 1.2.2. Program: Initiate self-help activities throughout the City. Such activities might include clean-up campaigns on a neighborhood by neighborhood basis, tree planting and landscaping efforts assisted by the City, or a promotional program to urge owners of old buildings to rejuvenate them.

6. SCENIC CORRIDORS COMPONENT

a. Introduction

This component, as described by the State, is intended to preserve aesthetic scenic features for the enjoyment of persons utilizing the community's roadways. It sets the stage for preserving high land values and securing architecturally desirable and well placed structures. The appearance of the street system and the views from them



give a very important impression of the natural and developed spaces within the City. Quality streetscapes and scenic vistas are an integral part of quality development. The purpose of classifying certain streets within the City as Scenic Corridors is to enhance the abutting properties and the City as a whole while fulfilling the intent of State legislation. The Scenic Corridors Map indicates those streets and highways for which special treatment is desirable.

The quality of the streetscape can have a positive impact on the lifestyle of persons living and working within the community. The design standards for public street improvements and private development should be integrated to reflect the character of the uses proposed and the neighborhood in which the improvements are to be made. Every effort should be made to ensure the continuity of the on-site improvements with those within the right-of-way as well as the continuity of streetscape design, planting materials, and other improvements along the length of the corridor.

With the dramatic scenic resources afforded our community, it is the task of this component to assure that the view of and from the road embodies the quality and virtues that the desert environment has to offer. The planning process to achieve this objective needs to be set in motion. This component will establish City policies to coordinate the programs that affect identified Scenic Corridors and highways.

### Definitions

The following definitions are provided to clarify the context and interpretation of the terminology used when referring to various scenic designations.

Official Scenic Highways (Scenic Routes) - Highways which are designated by the State as Official State Scenic Highways or Official County Scenic Highways and are signed as such. The State reviews eligible highways on the basis of the "complete highway," which is a highway incorporating not only safety, utility, and economy, but also beauty. The State also establishes standards requiring that pleasing appearance be a consideration in the planning and design process and requires that local governmental agencies take such action as necessary to protect the scenic appearance of the scenic corridor -- the band of land generally adjacent to the highway right-of-way, including but not limited to (1) regulation of land use and intensity (density) of development, (2) detailed land and site planning, (3) control of outdoor advertising, (4) careful attention to and control of earthmoving and landscaping, and (5) the design and appearance of structures and equipment.



Scenic Corridors - As used in this section, this title applies to those streets and highways within the City of Cathedral City that are designated by the City for scenic treatment and street beautification. The designation of Scenic Corridors in this section is within the bounds of State Law with respect to allowing local agencies to develop and adopt local scenic routes.

b. Opportunities/Constraints

The massive San Jacinto Mountain backdrop to the west, the Santa Rosa range to the south, and the little San Bernardino Mountains and San Geronio Peak to the north, with their spectacular rock formations, make this area one of the most impressive and picturesque desert environments in California. The scenic splendor of the desert is apparent in the views to the mountains from the arterials that traverse the desert floor. Other scenic assets which have been identified include: the desert valley in which the City is located with its natural features such as sand dunes and desert flowers; and an existing planned residential development with golf course, Cathedral Canyon Country Club, offers another scenic asset, as will further planned developments such as the approved Sandstone Country Club. Views along and from the roadway can easily be destroyed by careless littering and by poor street design, development controls, and sign and billboard regulations. These deterrents to scenic preservation affect both man-made and natural amenities since the desert's scenic environment is affected by roadways and development projects that are not well planned or are not ecologically sound because of the desert's delicate and sparse vegetation and fragile geologic features which are subject to permanent scarring.

The aesthetic qualities of the natural environment unquestionably establishes the community as worthy of protection and improvement along all scenic corridors. These amenities are particularly apparent to visitors and residents as they travel the City's roadways.

Discussion of Existing Conditions and Needs/Deficiencies are detailed in other sections of the General Plan; those specifically related to the Scenic Corridors topic here include those within the Community Structure Section, i.e., Community Sectors, Activity Centers, and Freeway and Major Arterials components.

The importance of establishing and implementing a Scenic Corridors program is especially apparent for the rights-of-way within the City where the following items are lacking:

- o Preservation and improvement of areas adjacent to the street



- o Street improvements; including curbs and gutters
- o Street beautification; including landscaping, parking design, and setback requirements
- o Recreation linkage systems; including open space, bikeways and pedestrian paths

c. Objectives, Policies and Programs

Based on the preceding discussion of existing conditions, needs, and opportunities, the following objectives are established as desired future conditions. Policies and programs are specified to achieve the objectives.

1. Objective: Provision for the development, establishment and protection of scenic corridors within the City in coordination with adopted City policies.

- 1.1 Policy: The City will seek to preserve and maintain those areas or sites which are found to have exceptional scenic value. Treatment along scenic corridors should preserve and enhance the unique features in the region whether natural or manmade, such as structures of architectural historic or civic value.

- 1.1.1 Program: Any new electric or communication distribution facilities or the relocation of existing overhead electric or communication distribution facilities in proximity to and which would be visible from officially designated scenic highways shall be placed underground in accordance with the applicable rules, regulations, and tariff schedules of Utility then on file with the California Public Utilities Commission. "In proximity to" is defined as being within 1,000 feet of the road right-of-way of officially designated scenic highways. Routine maintenance, operation, repair and reconstruction of existing overhead electric and communication facilities would not require undergrounding of those facilities.

- 1.1.2 Program: The City will encourage coordination between City, County and State levels of government and the Coachella Valley Association of Governments concerning the Scenic Highway Program.



- 2.2 Policy: The City will encourage scenic corridor treatment that respects the integrity of the ecological environment - whether desert or mountainous. Such delicate areas, although subject to encroachment by man's development, should be preserved in their entirety wherever possible, or in large enough areas so as to maintain the indigenous quality which existed prior to man's encroachment.
- 2.3 Policy: The City will control through appropriate tools, such as zoning and subdivision ordinances, developments which may directly or indirectly affect vistas or scenic focal points.
- 2.3.1 Program: No off-site outdoor advertising displays shall be permitted adjacent to a Scenic Corridor.
- 2.3.2 Program: The size, height, materials, colors, and type of on-premises signs within a Scenic Corridor shall be the minimum necessary for identification. The design shall be such that the signs blend with the environment, utilizing natural materials when possible. Ordinances which require the amortization and removal of nonconforming signs shall be strictly enforced.
- 2.3.3 Program: Earthmoving operations which expose soil surfaces shall be required to reestablish vegetation to bind the soil, prevent water or wind erosion, and reestablish natural vegetative appearance.
- 2.4 Policy: The City will utilize its Scenic Corridors wherever possible for scenic and recreation links (equestrian, pedestrian, and bike trails) between scenic areas, open space, and recreation/activity centers.
- 2.5 Policy: The City will prepare specific plans for Scenic Corridors which will include typical cross sections, landscape materials, and facility improvements along their lengths. Landscape treatment should increase the diversity of experiences available to the traveler, and should not be restricted to any one amenity, but rather any treatment that will add to the quality of the Scenic Corridor. The relationship of distance between the viewer and the view as well as the duration of the visual experience should also be taken into consideration.



2.5.1 Program: Trees and other roadside plantings should be utilized to protect and enhance the view from the road. Protection or enhancement of scenic qualities should be the primary consideration in any proposed removal of mature trees and shrubs.

2.6 Policy: The City will develop and implement the Downtown Redevelopment Program with emphasis on the treatment of the Highway 111 Scenic Corridor as it transects Redevelopment Project Area No. 1.

2.6.1 Program: The City will establish special street sections that will be effective and practical in the downtown area. Sensitivity must be taken in the special circumstances of the area, i.e., size and shape of parcels, lack of building setback from the highway, etc.

3. Objective: Designation of Highway 111, Date Palm Drive, De Vall Drive, Gerald Ford Drive, Cathedral Canyon Drive, Ramon Road, Vista Chino, and Interstate 10 as Scenic Corridors and identification of significant scenic features related thereto.

#### d. Implementation

The inclusion of this Scenic Corridor component as part of the Cathedral City General Plan strengthens the City's objectives for enhancement of the community's scenic and aesthetic qualities and promotion of favorable image. Thus, the Scenic Corridor component is, in itself, an implementive tool of its own objective.

The selection of street treatment will be based on an analysis of the street, its relationship to the City's overall circulation system and to the land uses that it traverses.

#### Street Layout

Street treatment is affected to a substantial degree by the basic physical layout of the roadway improvements. The design depends on the street type, whether it is a major thoroughfare or collector, and the land uses through which it is routed. The number of traffic lanes, the width of the lanes, and the amount of on-street parking allowed can affect not only the traffic volumes and safety of motorists, but also the immediate environment of the surrounding land uses. Restriction of on-street parking and the use of median island and parkway landscaping can mitigate the unsightly effects of roadways to



those persons living and working in adjacent areas. The provision of alternative transportation modes, such as bikeways, bus lanes, and pedestrian corridors, can provide not only an alternative means of movement for the traveler, but also visual relief for residents and motorists. Another scenic treatment which can be incorporated into the street layout is linear or corner parks which create diversity in a street's spatial configuration. These can be especially effective at major intersections and at entrances to the City where a "character" can be established for the entire length of the street.

### Landscaping

The use of landscaping is very important in the development of the character for Scenic Corridor. The City, being located in a desert environment, offers a unique choice of landscape treatment alternatives. The City can utilize either native or non-native landscaping in the development of its Scenic Corridor. Native landscaping can best be defined as plant materials which are indigenous to the desert environment. Non-native landscaping consists of plant materials which are foreign to the desert. The choice of a landscape type to be used along a given corridor is determined by the landscaping treatment characteristic of the existing development and the overall character of the area. Landscaping must be controlled so as to provide the most advantageous view from the roadway as well as to create interest and variety. Careful consideration should be given to assure that a street's landscape pattern does not conflict with that of existing development. In undeveloped areas where a Scenic Corridor treatment is proposed, new development should be encouraged to utilize plant materials which complement and maintain the continuity of the street treatment.

The focal point of most landscaping treatments is the choice of trees, which act as the most dominant aspect of the scene. Initial acquisition costs and maintenance costs notwithstanding, careful consideration should be given to the proposed use of trees. Trees should be chosen on the basis of the purpose for which they are intended -- i.e., shade trees, ornamental trees, flowering trees, trees for windbreaks -- each having its place in a logical landscape scheme.

Undoubtedly palm trees will continue to play a prominent roll in the landscape treatment within the City. Whether the palm tree is the primary tree or is placed in specific locations along a Scenic Corridor will depend on the character of the surrounding environment.

### Street Fixtures and Ornamentation

The scenic amenities and environmental character (residential or commercial) of a Scenic Corridor can be greatly affected by subtle details within the street right-of-way. Undergrounding power and telephone lines greatly improves the appearance of



the streetscape. Treatment of aboveground vaults, signal control boxes, meters, valves, hydrants, and other devices can easily be incorporated into the overall street treatment by using architectural details in their design that match the architectural theme of the surrounding land uses. The design of street signs, signals, and directional and regulatory signs can, in a sense, tie these fixtures together and make them an integral part of the street treatment.

#### e. Related General Plan Components and Zoning Tools

The following portions of the City's General Plan are related to the Scenic Corridors component to varying degrees:

1. Open Space. The Scenic Corridor Component is strongly related to Open Space, inasmuch as the definition of Scenic Corridor is that visible land area of significant natural and urban open space value traversed by the roadway.
2. Circulation. Since the Scenic Corridor Component deals primarily with the treatment of movement routes and the visual surroundings of these routes, the Circulation Component, including the Freeway and Major Arterial Section, should strive to implement the objectives of the Scenic Corridor component.
3. Land Use. Since the Land Use Component prescribes definitive uses for the land, its impact is substantial on the quality and type of view seen from the Scenic Corridor or Scenic Route.
4. Conservation. The Conservation Component attempts to preserve many of the qualities necessary for the development of a Scenic Corridor or Scenic Route; thus its effectiveness is a determinant of the success of the Scenic Corridor Component.
5. The Other Components. The Noise, Seismic Safety and Safety, Community Sector, Activity Center, and Urban Design components are all either directly affected by or indirectly affect the Scenic Corridors Component. For instance, if the Scenic Corridors Component called for increased setbacks along major thoroughfares, this requirement would result in a reduction of noise for adjacent development while at the same time it would increase the view parameters along the street.
6. The Zoning Ordinance and Other Regulations. The zoning ordinance provides various regulatory controls that assist in implementation of the objectives of the Scenic Corridor component, as do the other controls listed.



### The Zoning Ordinance

- o Architectural and Design Reviews
- o Site Plan Review
- o Permitted/Conditional Uses
- o Building Setbacks
- o Residential Densities
- o Building Coverage
- o Minimum Lot Area
- o Planned Development/Specific Plan
- o Sign Regulation
- o Flood Plain

### Subdivision Regulations

- o Limitation of Cut and Fill
- o Tree Preservation and Planting
- o Bank Seeding and Planting
- o Limited Access onto Scenic Corridors & Routes
- o Low Density and Limited Use of Steep Lands
- o Cluster Development
- o Screening
- o Road Design Standards
- o Underground Utilities
- o Right-of-Way Requirements

### Building Code

- o Maintenance Controls
  - \* Housing Code
  - \* Fire Prevention
  - \* Water Pollution



- \* Litter Control
- \* Weed and Insect Control

## B. LIVING ENVIRONMENTS

The purpose of the living environments section of the Plan is to shape the overall pattern and diversity of land development in the City, with particular emphasis on access to the City's living environment through housing. This section is also intended to provide the basic guidance for land use decision making, whether that use is a new one or the result of redevelopment.

This section contains three components. They are subjects which link the overall structure of the community to the actual projects and developments people experience in their everyday lives. The components include:

- o Land Use - The categories of use envisaged in the Plan, what they mean, and how they are to be implemented.
- o Housing - Needs for shelter and programs to satisfy those needs in accordance with very explicit state law, including thorough documentation.
- o Redevelopment - Guidance for the use of powerful redevelopment tools, their use in the existing redevelopment area and potential for application elsewhere in the City.

The living environments section is related directly to all other parts of the Plan through the land use and housing components. It is the major reason a community structure is needed. It reflects both existing development and guides new development. This total development is what all of the support systems are intended to serve. It is the fabric of the City all implementation activities are designed to bring about. It recognizes, partly through the redevelopment process, that Cathedral City is already at concurrent multiple states of development: old, new, replacement, infill and expansion.

### 1. LAND USE COMPONENT

#### a. Scope

The land Use Component of the Plan defines the basic pattern of development within the City and the relationships between the different land use types. Any land use plan must be built upon what already exists. However, land use patterns may be redirected to achieve the basic goals and objectives of the overall Plan.



Land use categories will be defined which provide definition of existing uses and which provide for new land use types as a means of achieving Plan objectives. These land use categories will ensure the logical organization of residential, commercial, industrial, and public facilities and set a framework for future growth.

It is important to remember the conceptual nature of the Land Use Plan. It provides direction for determining land use relationships but the boundaries of land use categories, as shown on the land use diagram, should not be interpreted literally. They represent the intent of the Plan in terms of basic land use relationships and the spatial juxtaposition of land uses, but their edges are not hard and fast. Precise boundaries of land use categories will be determined at the zoning and site specific approval level after a determination is made that the intent of the Plan is being implemented.

b. Existing Conditions

Existing land use patterns in the City reflect the historical development and intensification along the Highway 111 corridor. In this area, strip commercial uses have developed along Highway 111 with residential uses adjacent. Development has tended to locate along the major arterial routes with Date Palm Drive and Ramon Road being the focus of newer strip commercial development.

As in most communities, residential is the predominant land use. It is divided between traditional single family detached housing, some higher density development, mobile homes, and resort residential which is oriented to a golf/open space amenity.

Residential areas are located to the north and south of Ramon Road, and to the south of what is generally viewed as the Central Business District (CBD) along Highway 111. The higher density residential uses are located between Ramon Road and the Whitewater River and adjacent to the CBD. Lower density residential uses are reflected to the north of Ramon Road and south of the CBD in the area known as The Cove. Strip commercial land uses are located adjacent to Ramon Road and Date Palm Drive. Commercial uses are also reflected along State Highway 111. Commercial centers are beginning to emerge at Gerald Ford Drive and 34th Avenue where they intersect with Date Palm Drive. An industrial area located just north of the CBD encompasses the City's only industrial park development. Significant open space areas are located in the northeast reaches of the City limits and directly south of The Cove community. The Whitewater



flood control area runs diagonally through Cathedral City, bisecting the City from northwest to southeast with another large scale open space feature.

The character of commercial development has been primarily small user strip development with a few small shopping centers. More recent development has seen some well planned shopping centers developed, setting a good example for future development.

Industrial development has also been largely small user, small parcel development with little "planned" or "integrated" development. Perez Road between Date Palm Drive and Cathedral Canyon Road has seen a more planned approach to industrial type development which includes some office and retail use on larger parcels with multiple users. This area might characterize a "business park" type of development.

A statistical breakdown of existing land uses is shown in Table 1. The acreage indicated accounts for approximately 6153 dwelling units and a population of 11,096 according to the 1980 Census. These figures pertain only to the existing City jurisdiction and do not include planned expansion areas.

#### c. Needs

The existing conditions show a random mix of land uses with some inconsistencies relative to compatible combinations of land uses. In some areas a mixture of uses may be desirable; in others certain land uses can serve as a buffer between adjacent and otherwise incompatible uses.

Areas which exhibit incompatible land uses are those central areas which have pockets of commercial development removed from major arterials. Perhaps the most significant problem area in the City also presents the greatest opportunity for the benefits of mixed use. Residential and commercial uses, interspersed with some warehousing, predominate in those areas adjacent to Highway 111. This area exhibits a need for residential uses in proximity to employment opportunities in the present CBD. Certain types of residential uses may be appropriate as land use buffers near the industrial and commercial areas, as well.



**TABLE 1**  
**EXISTING LAND USE**

USE	ACRES	USE	ACRES
<b>RESIDENTIAL</b>		<b>NON-RESIDENTIAL</b>	
Very low density (1 du/5 ac)	1930	General Commercial	469
Low density (2-4.5 du/ac)	867	Industrial	118
Resort residential (3-6.5 du/ac)	424	Schools	53
Medium density (4.5-8 du/ac)	416	Cemetery	80
High density (8-24 du/ac)	18	Open space	5033
Sub-total	3655	Sub-total	5753
		<b>TOTAL</b>	<b>9408</b>

One of the most significant issues relative to existing land uses is the large amount of vacant land which has already been designated for residential development. These areas offer excellent opportunities for "in-fill". However, in the interim, an excess of vacant areas proves a problem for public safety and for cohesiveness in existing neighborhoods. These vacant areas are generally located in the lower density residential neighborhoods north of Ramon Road in existing subdivisions.

Much development in the City represents an under-utilization of land. These areas present special types of problems as well as an inherent potential for diversity in residential zoning or special mixed use areas. The most obvious examples of under-utilization are those areas adjacent to major arterials through the City and in residential areas with a high percentage of vacant lots.

Ramon Road and Date Palm Drive, in combination with Highway 111, make up the circulation "spine" of Cathedral City. While the Highway 111 corridor exhibits more intensive land uses, those areas adjacent to both Ramon Road and Date Palm Drive could bear further scrutiny.

Interface with other components of the Plan is fundamental. The land use element generates the local share of traffic which justifies the highway routes



and classifications shown in the transportation component. At the same time, historic circulation patterns shape and influence significantly the distribution of proposed land uses. The open space component is not only a set of land use categories but a basic ingredient giving the City visual and functional definition. These two components, transportation and open space, combine in the community structure component to influence the overall shape and activity patterns within the City. It is this fundamental pattern that the land use categories are intended to carry out.

These fundamental relationships are further influenced by components such as: 1) recreation, which is the main provision for leisure activities; 2) noise, which modifies land use patterns and development standards as necessary to protect citizens from unhealthy noise exposure; and 3), most importantly, housing, which provides for the residential opportunities to serve a wide range of housing cost needs.

It is important to note that existing legal building sites (lots) designated for residential use in the Plan may be used at least for single family residential purposes, even if the lots are substandard in size according to the density range in the Plan. Resolution of the exact impact of the Plan (all elements) on each lot will be achieved by the zoning ordinance and maps as well as certain adopted street sections adjacent to those lots with frontage on arterial highways.

The intent of the land use element is to enhance the overall long term developability of the City's land resources. There will be a limited number of cases in which individual parcels will experience development problems because of use changes; lot size, location or shape; development standard requirements; needed street improvements or some combination of these factors.

Land use needs have been determined through the identification of community issues and the evaluation of the research and data analysis phases of the Plan development. Needs are outlined as follows:

- 1) Areas of the City are old, poorly planned and in need of rejuvenation:
- 2) The City has an image of a community with considerable substandard development.
- 3) The pattern of development is random and does not represent orderly growth and development.



- 4) Extensive subdivided areas are sparsely developed and in need of substantial corrective work.

d. Opportunities/Constraints

The land use types within the City and their distribution and relationships provide an opportunity to bring together many of the goals and policy statements that make up this Plan. The existing land use distribution provides a starting point from which to build upon and/or change as best meets the City's goals and objectives.

Existing land uses reflect the historical development pattern in the upper Coachella Valley with urbanization focused in nodes along the Highway 111 corridor. Cathedral City is no exception with the majority of existing uses located in relatively close proximity to Highway 111. Intensities of development have also been relatively low giving the City an opportunity to both intensify development and to spatially expand land use development northerly from the Highway 111 corridor.

The construction of Interstate 10 provides a whole new access and development focus, one that can be focused towards employment generating uses and tourist oriented uses. In addition the underutilization of subdivided lands northerly of Ramon Road again provides the opportunity to intensify development and shift the focus of activity within the City to the north of the Highway 111 corridor.

While a great amount of undeveloped land is already subdivided, several large parcels are strategically located throughout the City which do not have this constraint. They present an opportunity to use the flexibility and creativity of a Specific Plan. With this device it is possible to customize land use types, locations and mixes within the site, so long as overall limits designated in the General Plan are not exceeded. Rules for application of this technique will be contained in the Zone Code.

In order to maximize the opportunities available to the City, the General Plan establishes various land use classifications to direct the location, type, and amount of development in the City. Land uses are divided into 3 basic types of uses: residential, employment, and special uses. These basic use types are further divided into 16 specific land use designations. These designations are described as follows and depicted on Exhibit 5, with a statistical summary shown in Table 2. All acreage figures are gross acres.



## 1) Residential

**Low Density Residential:** This category permits residential development from a base density of 2 du/ac to a maximum of 4.5 du/ac. It is intended to accommodate single family detached dwelling units.

**Resort Residential:** This category permits residential development from a base density of 3 du/ac to a maximum of 6.5 du/ac. It is intended to accommodate single family detached and attached dwelling units in a resort development setting. Various resort type amenities are permitted in this use category including golf facilities, tennis and swim facilities as well as tourist/resort serving uses including, but not limited to, hotels, motels, recreation vehicle resorts, restaurants, and golf tennis pro shops.

**Medium Density Residential:** This category permits residential development from a base of 4.5 du/ac to a maximum of 10 du/ac. It is intended to accommodate single family detached and attached dwelling units, duplex and manufactured housing development.

**High Density:** This category permits residential development from a base of 11 du/ac to a maximum of 20 du/ac. It is intended for single family attached dwelling units, multiple family and apartment development.

## 2) Employment

**General Commercial:** This use category is intended for all levels of commercial development including that of neighborhood, community and regional scale.

**Business Park:** This use category permits combinations of light industrial, office and ancillary commercial uses. The intent of this use category is to provide a transition between category uses with adequate performance controls to make this category compatible with non-industrial use areas.

**Tourist Commercial:** This category is intended to accommodate commercial uses which serve the tourist trade. Uses can include a combination of retail and service commercial as well as hotel, motel and other transient use facilities. So long as a majority of the site is not devoted to this use, limited residential use may be accommodated.

**Industrial:** This category is intended to provide for light industrial and related uses which are not likely to have adverse effects upon each other or upon neighboring residential or commercial areas. Uses may include administrative offices, and commercial



services not appropriate for locations in general commercial areas.

### 3) Special Uses

Various special uses are designated in the General Plan to provide for special needs or preservation concerns. These special uses include:

- Schools
- Parks
- Civic Center
- Open Space

Open Space is further broken down into subcategories, described as follows:

Open Space - Cemetery (OS-C): A special designation for the existing cemetery use in the City. Open Space - Residential (OS-R): An open space designation designed to preserve sensitive environmental areas but allowing residential development at a maximum density of 1 dwelling unit/20 acres.

Open Space - Watercourse (OS-W): An open space designation designed to restrict land use within flood hazard areas.

Open Space - Other (OS-O): An open space designation for preservation of any additional sensitive environmental areas within the City.

In addition to the basic land use type and designations outlined above, the General Plan incorporates two "special overlays" to provide implementation flexibility. These overlays include:

Bonus Density Program (B): An overlay which allows increases in density yield in specified areas as an incentive to consolidate lots of record into large aggregations for development as well as to encourage high quality development. The purpose of this bonus is to encourage the intensification of development in certain portions of the City, in some cases where many vacant small size lots of record exist. As a general rule, the bonus density should not exceed the base density maximum by either 25% for the medium density designation or 50% for the high density designation.

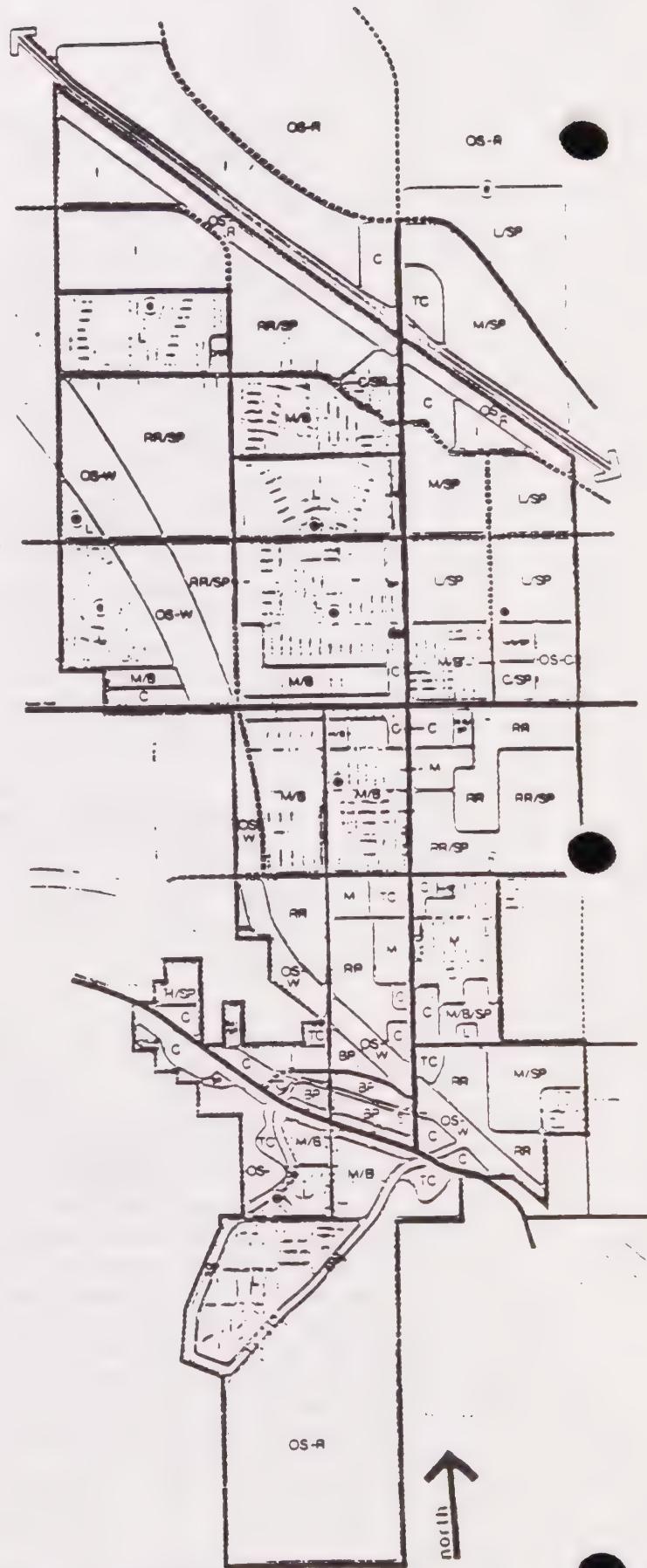


# LAND USES

## Legend

L	LOW DENSITY RESIDENTIAL (2-4.5 %/a)
RR	RESORT RESIDENTIAL (3-8.5 %/a)
M	MEDIUM DENSITY RESIDENTIAL (4.5-10 %/a)
H	HIGH DENSITY RESIDENTIAL (11-20 %/a)
TC	TOURIST RESIDENTIAL (UP TO 20 %/a)
C	GENERAL COMMERCIAL
BP	BUSINESS PARK
TC	TOURIST COMMERCIAL
I	INDUSTRIAL
●	SCHOOL <small>ELEMENTARY SCHOOL (10-15 acres) HIGH SCHOOL (15-20 acres)</small>
○	PARK
●	CIVIC CENTER
OS-C	OPEN SPACE-CEMETARY
OS-R	OPEN SPACE-RESIDENTIAL (10-20 %/a)
OS-W	OPEN SPACE-WATERCOURSE
OS-O	OPEN SPACE-OTHER
B	BONUS DENSITY PROGRAM
SP	SPECIFIC PLAN REQUIRED

————	ARTERIAL HIGHWAY
————	MAJOR HIGHWAY
————	SECONDARY HIGHWAY
-----	PROPOSED MAJOR HIGHWAY



# CATHEDRAL CITY GENERAL PLAN

EXHIBIT 1



TABLE 2  
CATHEDRAL CITY GENERAL PLAN

LAND USE	ACRES	MINIMUM NUMBER OF UNITS	MEDIAN NUMBER OF UNITS	MAXIMUM NUMBER OF UNITS	POP. per DU	POPULATION RANGE		
						MIN.	MED.	MAX.
Low density residential (2-4.5 du/ac)	1891	3782	8,148	8,510	2.5	9,455	15,365	21,275
Resort residential (3-6.5 du/ac)	1,664	4,992 (4,992)	7,904 (7,904)	10,816 (10,816)	1.0* (3.0)**	4,992 (14,976)	7,904 (23,712)	10,816 (32,448)
Medium density residential (4.5-10 du/ac)	2,058	9,261	14,921	20,580	1.75	16,207	26,112	36,015
High density residential (11-20 du/ac)	47	517	729	940	1.3	672	948	1,222
Tourist commercial	112							
General commercial	710							
Business park	138							
Industrial	500							
School/park	88							
Open space								
Residential	1,355							
Watercourse	765							
Cemetery	80							
9,408		18,552	29,700	40,846				

Total Year Around Population\* 31,326 50,329 69,328  
Total Peak Period Population\*\* (41,310)(66,137)(90,960)

\* Year around population assumes minimum occupancy of resort residential units at an average of 1 person/du

\*\* Increased occupancy of these units during the tourist season yields a peak period population (shown in parenthesis) at an average of 3 persons/du.



**Specific Plan (SP):** An overlay which requires any development proposed to be processed through the Specific Plan procedure as defined by State Law. The purpose of this overlay is to achieve integrated, coordinated planning for larger pieces of land which remain to be developed. This designation also affords the developer more latitude in preparing a planning concept in return for superior design and coordinated implementation. Uses complementary to the base designation may also be established so long as they constitute less than 20% of the Specific Plan area.

Each area designated for Specific Plan treatment should be the subject of a concept level Specific Plan adopted by resolution. Each ownership of project should then be the subject of a regulatory Specific Plan adopted by ordinance. This would constitute the zoning on the property. The two may be processed concurrently.

If a property owner who is part of a larger Specific Plan area wishes to proceed to develop before other property owners, a mechanism should be set up as permitted by Government Code to require the initial developer to fund the Concept Plan. He would then recover costs from subsequent owners as they process regulatory Specific Plans.

An alternative would be to establish joint property owner funding of the Concept Plan as a mutual effort administered by the City.

e. Objectives, Policies and Programs

Based on the land use conditions, issues, needs and opportunities outlined above, the following objectives are established as desired future conditions toward which the Plan is directed. Policies and programs are also identified to achieve land use objectives and maximize opportunities.

1. Objective: A balance of land uses is desirable where a variety of housing opportunities are available, job opportunities are commensurate with the resident labor force, and commercial and community services are sufficient to satisfy resident and tourist needs.

- 1.1 Policy: The City shall establish and maintain a balance of land uses throughout the community.



- 1.1.1 Program: Establish a development monitoring system to maintain current land use data and determine ongoing capability to fund public services and facilities.
- 1.1.2 Program: Establish a General Plan review process to ensure periodic review and update of Plan components.
- 2. Objective: To maintain efficiency in location and pattern of development within the City.
  - 2.1 Policy: The City shall promote infill development where appropriate to maximize efficiency of support systems.
    - 2.1.1 Program: Identify vacant or underutilized areas of the City where support systems are capable of serving intensification of development
    - 2.1.2 Program: Utilize the "bonus density" overlay to encourage aggregation of small record lots.
  - 2.2 Policy: The City shall improve efficiency of existing strip commercial areas and control further strip commercial development.
    - 2.2.1 Program: Establish design standards for access control, curb cut location, and joint access points.
    - 2.2.2 Program: Review special street sections for feasibility of creating "frontage" roads in identified access conflict areas.
- 3. Objective: To create community and neighborhood identity.
  - 3.1 Policy: The City shall establish land use controls which are responsible to community needs and concerns.
    - 3.1.1 Program: Update the zone code to provide all necessary land use control techniques.



3.1.2 Program: Establish a Specific Plan procedure for developing major land holdings.

3.1.3 Program: Develop specific performance standards for mixed use developments which contain residential uses.

3.2 Policy: The City should recognize existing community sectors or development areas as desirable components of community identity.

3.2.1 Program: Establish planning areas as building blocks of community planning efforts.

3.2.2 Program: Identify development control needs to support individual planning area character.

## 2. HOUSING COMPONENT

### a. Scope

The State of California mandates that all cities and counties include a Housing Element in their General Plan. The purpose of the housing element is to provide a method for municipalities to identify the housing needs of the community and to set forth plans and actions through which these needs will be met. The Government Code is quite explicit about the scope of housing elements. It requires "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, factory-built housing, and mobile homes, and shall make adequate provision for the existing and projected needs of all economic segments of the community."

It further requires, in part, "An assessment of housing needs and an inventory of relevant resources and constraints, to include the following:

- (1) Analysis of population and employment trends, documentation of projections and a quantification of the locality's existing and projected housing needs of all income levels.
- (2) Analysis and documentation of household characteristics, including ability to pay, overcrowding, and housing stock condition.



- (3) An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment.
- (4) Analysis of potential and actual governmental and nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels.
- (5) Analysis of any special housing needs.
- (6) Analysis of opportunities for energy conservation with respect to residential development."

Finally, it requires goals, quantified objectives and policies related to housing maintenance, improvement and development. Along with this there must be a five year schedule of actions by the City identifying adequate housing sites, particularly for low and moderate income households; governmental obstacles to be feasibly removed; methods of conserving and improving existing affordable stock and ways of promoting housing opportunity. Parties responsible for these actions must also be identified.

The content of this housing element is responsive to both State requirements and the desires of the community as they have been expressed through the General Planning Program. This element along with the General Plan was developed with the help of a Citizens Advisory Committee formed exclusively for this purpose. This committee met several times during the formation of the General Plan. In addition to this public participation, work sessions were held throughout the process with the City staff. Public hearings were also held to allow public input into the planning process.

b. Existing Conditions

Data for estimating housing need in Cathedral City have been obtained from several sources including the 1980 Federal Census, the County of Riverside, field surveys and interviews. Because the City was not incorporated when the census was taken, some characteristics of the population and existing housing stock of the City must be inferred from regional or subregional data. References to 'County' statistics will refer to unincorporated Riverside County unless otherwise qualified.



Table 3

**Cathedral City Population and  
Housing Characteristics - Areas of Concentration<sup>1</sup>  
(1978 Special Census)**

<u>Area</u>	<u>% Minority</u>	<u>% 65 &amp; over</u>	<u>Medium Income</u>	<u>% Mobilehomes</u>	<u>Low Vacancy Rate</u>
County Average	19.0	17.2	\$11,077	30.1	5.1
Census Tract 447 - North of Ramon Road and West of Whitewater River*	54.1	----	\$ 9,432	----	4.5
Census Tract 448.03 - South of Highway 111 & West of West Cathedral City Storm Drain*	96.9	----	\$ 7,499	57.7	----
Census Tract 449.01 - North of Perez Road, between Date Palm Drive and the Whitewater River to the railroad tracks.	27.9	32.2	\$ 7,857	46.7	2.1
Census Tract 449.02 - North of the Whitewater River and East of Date Palm Drive*	----	22.7	\$14,428	54.9	----
Census Tract 450 - Between East and West Cathedral City Storm Drains south of Perez Road	----	----	\$11,403	----	3.8

<sup>1</sup> Based on deviation from average statistics for the unincorporated portion of Riverside County  
 \* Includes areas outside the City limits



### Population Characteristics

The 1980 Federal Census estimated the population of the geographic region now within the City boundaries to be 11,096 persons. This represents a 51.4 percent increase over the 1970 population of 7,327.

Ethnically the 1980 Census shows that 86.7 percent of the population is White, 1.1 percent Black, 0.6 percent American Indian and 11.6 percent Other, likely primarily Hispanic. Persons of Spanish origin were identified as 18.8 percent of the total population and Mexicans comprised 91.0 percent of that group. The trend of the community has been toward a more diverse population as evidenced by the 96.6 percent White count of the 1970 Census compared to the 86.7 percent of 1980.

Table 4  
Cathedral City Age Distribution

<u>AGE GROUP</u>	<u>1970</u>		<u>1980</u>	
0 - 5	625	8.5	708	6.4
6 - 13	945	12.9	914	8.2
14 - 17	443	5.5	563	5.1
18 - 20	275	3.8	448	4.0
21 - 24	317	4.3	644	5.8
25 - 34	834	11.4	1343	12.1
35 - 44	735	10.0	1076	9.7
45 - 54	855	13.9	1170	10.5
55 - 64	1022	13.9	1728	15.6
65+	1315	17.9	2502	22.6
MEDIAN AGE		38.1		43.6

A 1978 special census indicated that minorities represented 19.0 percent of the County population. This census identified specific tracts, some within Cathedral City, as areas of minority concentration due to significant Latino populations. The distribution of the minority population is summarized in Table 3 with other demographic data. The City continues to be an area of minority concentration in that 21.9 percent of the population are ethnic minorities.

The median age of the residents of Cathedral City indicated by the 1980 census is 43.6 years. This is an increase from the 1970 figure of 38.1 years. Table 4 provides an age group distribution of the City's population.



Immediately evident is the significant growth in the retired age group of 65+, from 17.9 percent of the total in 1970 to 22.6 percent in 1980. During this same period the 18-34 years and 35-64 years groups were relatively stable in population share, while the percentage of children 0-17 years declined significantly from 26.9 percent in 1970 to only 19.7 percent in 1980. In fact, the number of 6-13 year olds actually decreased from 1970 to 1980 while the total population increased by over 50 percent.

The 1978 Special Census indicated an average of 17.2 percent of the unincorporated population was over 65 years of age. Census tracts, including portions of Cathedral City north of the Whitewater River, were designated areas of elderly population concentration (see Table 4). Cathedral City has a population disproportionately older than the County average and is attractive to retirement age persons.

#### Household Characteristics

The Southern California Association of Governments reported that on January 1, 1983 Cathedral City had 5,056 households and a total of 7,246 housing units. Of these units 2,190 are unoccupied. No further household characteristics are currently available, however, data from the 1978 Special Census can be used to infer Cathedral City household characteristics.

This census indicated that 16.5 percent of the unincorporated households had a member who was handicapped. In the vicinity of Cathedral City this figure was 15.8 percent and no census tracts within the City were identified as having a concentration of handicapped households.

The number of large households in the City consisting of five or more members was estimated to be 9.0 percent of the total, well below the County average of 17.4 percent.

As is evident from the age distribution of the City's population, elderly headed households are a large proportion of the households in the City. In 1978 the County average was 23.0 percent while in the vicinity of the City this statistic was 24.9 percent.

The most recent Countywide income information currently available is from the 1978 Special Census. Median household income in unincorporated Riverside County was estimated to be \$11,077. Median income in Cathedral City was estimated to be \$9,782 at that



time, 11.7 percent less than the County figure. Three census tracts within the City were identified as areas of sub-median income households. Incomes in these tracts ranged from 17 percent to more than 33 percent below the County median. It is anticipated that the 1980 Census will confirm that Cathedral City is a community primarily of low to moderate income households. Within the City, the 1982 median household income is estimated to be \$17,991.

### Housing Characteristics

The total number of housing units in Cathedral City as of January 1982 was 7,246. The "units at address" statistic indicated 80 percent of all units were single units and 20 percent were multiple units.

Riverside County is unique in that mobile homes provide about 30 percent of available housing in the unincorporated area (1978). Cathedral City was identified in the 1978 Census as an area of mobile home concentration. See Table 3 for distribution.

The growth and change in tenure of housing units over the period 1970 to 1980 are presented in Table 5.

Table 5  
Cathedral City Housing Stock

	<u>1970</u>	<u>Percent- age</u>	<u>1980</u>	<u>Percent- age</u>	<u>Change</u>	<u>Percent- age</u>
Housing Units	3744		6153		2409	64.3
Occupied	2939		4188		1249	42.5
Owner-Occ	1807	48.3	2788	45.3	981	54.3
Renter-Occ	1132	30.2	1400	22.8	268	23.7
Vacant, Yr-Rnd	671	17.9	1965	31.9	1294	192.8
Condominiums	22		1323		1301	5913.6

These statistics indicate that condominiums accounted for over half the total growth in housing units. Additionally, the past ten year's growth has been primarily in the second home category increasing the vacant year round category from 17.9 to 31.9 percent. In the occupied units, the percentage of owner occupied homes increased slightly from 61.5 percent to 66.6 percent over the ten year period.

The SCAG report indicated a 7.58% available vacancy rate for Cathedral City in 1983. This percentage did not include an additional 921 units that were listed



as vacant, but not for sale or rent. This large number of vacant units that are not for sale or rent is due to the seasonal characteristic of the Cathedral City housing market. Most of these units are owned, but occupied only during a certain part of the year, and normally not available to the private market for use. These units are used for recreation, second homes, migratory workers, etc. It is the available vacancy rate which represents the accurate number of units on the market for sale or for rent.

The 1978 Census identified portions of Cathedral City as census tracts below available vacancy rate. These tracts reported available vacancy rates of 2.1 to 3.8 percent. (See Table 3).

The California Department of Finance has determined the overall vacancy rate in Cathedral City to be 31.9 percent, from 1980 data. The components have been estimated to be 17.1 percent seasonal and 14.8 percent available. This information appears contradictory to that from the SCAG report.

The cost of housing in Cathedral City has increased considerably over the past ten years, as it has throughout the State. The statistics below indicate that while housing value and contract rent have both increased considerably, the percentage increase in home value is approximately one and one half times that of the increase in contract rent.

Table 6  
Cathedral City Home Price and Rent

	1970 <u>Census</u>	1980 <u>Census</u>	% <u>Change</u>
Housing Value			
Average	\$23,142	\$ 86,184	272.4
Median	\$21,145	\$ 74,170	250.8
Average Condo Value	---	\$165,353	---
Monthly Contract Rent			
Average	\$ 112	\$ 278	148.2
Median	\$ 104	\$ 270	159.5



## Distribution

<u>HOUSING VALUE (NON-CONDO)</u>	<u>%</u>	<u>RENT</u>	<u>%</u>
\$ 0 - \$ 9,999	0.4	NO CASH RENT	4.1
\$ 10,000 - \$ 14,999	0.6	\$ 0 - \$ 99	4.6
\$ 15,000 - \$ 19,999	1.2	\$100 - \$119	3.4
\$ 20,000 - \$ 24,999	1.2	\$120 - \$139	3.4
\$ 25,000 - \$ 29,999	1.8	\$140 - \$149	1.6
\$ 30,000 - \$ 34,999	2.3	\$150 - \$159	5.0
\$ 35,000 - \$ 39,999	3.4	\$160 - \$169	3.6
\$ 40,000 - \$ 49,999	7.4	\$170 - \$199	6.3
\$ 50,000 - \$ 79,999	39.4	\$200 - \$249	13.7
\$ 80,000 - \$ 99,999	19.4	\$250 - \$299	16.4
\$100,000 - \$149,999	14.2	\$300 - 399	23.2
\$150,000 - \$199,999	3.4	\$400 - \$499	9.5
\$200,000+	5.3	\$500+	5.3

Of the units vacant, the average value of a noncondominium unit for sale was \$147,859, that of a condominium unit was \$148,407 and the average rent of those units available for rent was \$326.

### Assessment of Housing Needs

The U.S. Department of Housing and Urban Development (HUD) defines a household in need of assistance as a low or moderate income family that experiences one of more of the following conditions:

1. Overpayment - When a household is paying more than 25 percent of its gross income for housing (including rent or mortgage, interest, taxes, insurance and utilities).
2. Overcrowding - A household is considered to be overcrowded when there is more than one person per room, as defined by the State housing and Community Development Department.
3. Substandard Housing - The 1976 Housing Survey of Riverside County defined a dwelling unit that required one or more major structural repairs as substandard. That definition is used here as well.

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<sup>1</sup> Dan Sheya, California Department of Finance, telephone conversation, December 29, 1981.



The first step in assessing housing needs is to determine where and how many lower income families reside in Cathedral City. Also, since housing problems are not confined to just the lower income families, the assessment of housing needs includes moderate income families as well. HCD guidelines provide the following definitions for distinctions among very low, low and moderate income families:

Very Low Income Family. A family whose gross income is 50 percent or less of the areawide median income.

Low Income Family. A family whose gross income is 51 to 80 percent of the areawide median income.

Moderate Income Family. A family whose gross income is 81 to 120 percent of the areawide median income.

As noted previously the median household income of Cathedral City area residents was estimated to be \$9,782 in 1978. This figure is estimated to be \$17,991 in 1982. Applying HCD standards for very low, low and moderate income levels to this figure, the following classifications are calculated:

Very Low Income. All households whose annual gross incomes are at or below \$8,995.

Low Income. All households with annual gross incomes in the range of \$8,995 to \$14,393.

Moderate Income. All households with annual gross incomes in the range of \$14,393 to \$21,589.



The current and 1970 Census household income distributions are presented in Table 7 below.

Table 7

Cathedral City Household Income Distribution

	1970 CENSUS	%	1982 (EST.)	%
LESS THAN \$ 5,000	1,074	36.5	641	15.3
\$ 5,000 - \$ 7,999	536	18.3	406	9.7
\$ 8,000 - \$ 9,999	335	11.4	247	5.9
\$10,000 - \$11,999	230	7.8	218	5.2
\$12,000 - \$14,999	309	10.5	297	7.1
\$15,000 - \$19,999	263	9.0	483	11.5
\$20,000 - \$24,999	94	3.2	481	11.5
\$25,000 - \$34,999	60	2.0	624	14.9
\$35,000 - \$49,999	24	0.8	498	11.9
\$50,000 OR MORE	14	0.5	293	7.0
Median \$	7,212		17,991	
Average \$	8,959		22,605	

SOURCE: Estimates by Urban Decision Systems, Inc.,

Since these income categories do not coincide with the income ranges of the very low, low, and moderate income families, an interpolation was done to bring the income categories into conformance<sup>1</sup> with the three family income ranges defined by HCD. The results indicate that approximately 1,170 households are in the Very Low Income category, 579 households in the Low Income category and 696 households are in the Moderate Income category. In May of 1984 SCAG produced the "fair share" numbers for which Cathedral

<sup>1</sup> Interpolation assumes that households are equally distributed throughout each income category. It is highly unlikely that this would be the case, but this method provides the best available means of identifying approximately how many households fall into these income categories.



City is responsible. By 1988 Cathedral City needs to increase its housing stock by 1,390 units. This is broken down further into income categories.

	Very <u>Low</u>	<u>Low</u>	<u>Moderate</u>	<u>Upper</u>
Housing Need by 1988	271	343	234	541
Percent	19.49	24.70	16.85	38.96

SOURCE: SCAG Regional Housing Allocation Model, May 7, 1984.

Approximately 61 percent of all Cathedral City households fall within the three identified income brackets. Of all households within the City, 20.4 percent are very low income, 25.1 percent are low income, and 16.2 percent are moderate income households. This is from 1980 Census data.

The Housing Element of the Riverside County General Plan identifies areas of concentration of these income brackets by census tract, based on 1978 Census data. This information is summarized in Table 9.

The State Department of Housing and Community Development has stated that overpayment is the most widespread housing problem in California. Overpayment is also a significant concern in Cathedral City, and presents the most widespread housing problem in the County.

As discussed earlier, the SCAG definition of overpayment is a household paying more than 30 percent of its gross income for housing (i.e., mortgage, interest, rent, insurance, taxes, utilities, etc.).

Cathedral City has selected locally-defined goals which make only a minor adjustment on SCAG's goals. A standard of 35 percent of gross household income will be applied to Very Low Income households, while Low and Moderate Income households will have a 30 percent standard applied. Cathedral City utilizes a 35% maximum of gross income for the very low income groups, because unfortunately that is a more realistic figure. Although a 30% or even 25% figure would be much more preferable, due to the high cost of housing in the area, coupled with the low incomes of the residents, 35% is a much more practical maximum. Maximum housing payments, based upon 1982 income estimates, for each income group are presented below:



<u>Income Group</u>	<u>Maximum Percentage of Gross Income</u>	<u>Maximum Monthly Housing Payment</u>
Very Low	35%	\$262
Low	30%	\$360
Moderate	30%	\$540

To estimate the number of households currently overpaying for housing, it is necessary to correlate housing payment and household income.

It should be remembered that SCAG uses the 30 percent standard and will overstate the problem compared with City standards for the Very Low category.

The result of SCAG's housing overpayment analysis is based on 1980 census data which indicates 736 low income households pay over 30 percent of their income towards housing. Table 8 breaks this information down further.

Table 8<sup>1</sup>

Cathedral City Housing  
Overpayment Characteristics

	<u>Very Low</u>	<u>Low</u>
Households	374	362
Owners	79	132
Renters	296	230

<sup>1</sup> From Southern California Association of Governments "Regional Housing Allocation Model", May 7, 1984.

A second major problem area for very low and low income households is overcrowded conditions. This problem has shown steady decline in recent years. State HCD found that between 1960 and 1970, overcrowding statewide fell from 9.5% to 7.8%. In 1976 it was found that there had been a further drop in overcrowding to about 5.5% or 425,000 of all households.

While there has been a reduction of overcrowding among all households, overcrowding still represents a major housing problem. Lower income groups, minority groups, large families, and renters are more likely to suffer from overcrowded conditions than the rest of the populace. Overcrowding among large families often results in children comprising a majority of the persons living in overcrowded housing conditions.

Unlike the "Overpayment" section, there is no cross-tabulation of overcrowded conditions and lower income



households. However, the 1976 Housing Assistance Plan Questionnaire circulated by the County did address overcrowded conditions by census tract, thus allowing for a comparison of those census tracts with a higher concentration than the countywide average of overcrowded conditions and those census tracts with a high concentration of very low and low income households.

The number of overcrowded units in Cathedral City was 374 according to the 1980 Census. This represents 76.7% of the total amount of housing.

Unsound housing units, or units in need of rehabilitation or replacement, represent the third major housing problem for low and moderate income households. The 1976 Housing Assistance Plan Questionnaire served as the data source for estimating the number of unsound housing units in the County and indicating where they are concentrated.

This study defined a unit as unsound when one or more of the following major repairs is needed to improve the housing structure's safety condition:

1. Roofing
2. Electrical Wiring
3. Flooring
4. Plumbing (flushable toilet)
5. Ventilation
6. Heating
7. Plumbing (hot, cold running water)
8. Insulation (heat)
9. Kitchen facilities

State HCD makes a general definition that a repair costing \$1,000 or more would be considered rehabilitation as opposed to general maintenance.

The County estimated that 11.5 percent of all housing units in the unincorporated County were unsound in 1978. Although the tracts now within Cathedral City were not identified as areas of unsound housing concentration, a visual survey of the City indicated that unsound housing may be a problem for a significant percentage of Cathedral City residents. A more detailed study is needed to quantify this need, but applying the 11.3 percent standard yields an estimate of 695 units in unsound condition.

A summary of housing indicators for Cathedral City is presented in Table 10. As is evident from the preceding discussion, Housing overpayment is the single most prevalent identified housing problem for Cathedral City residents.



TABLE 9

Cathedral City Areas of Very Low, Low  
and Moderate Income Household Concentrations  
(1978 Special Census)

<u>Area</u>	<u>% Very Low</u>	<u>% Low</u>	<u>% Moderate</u>
Unincorporated Riverside County	22.9	18.2	18.9
Cathedral City	27.9	13.8	16.6
Census Tract 447 - North of Ramon Road and West of Whitewater River*	----	31.5	33.8
Census Tract 448.03 - South of Highway 111 & West of West Cathedral City Storm Drain*	33.0	21.6	----
Census Tract 449.01 - North of Perez Road, between Date Palm Drive and the Whitewater River to the railroad tracks.	24.7	33.5	24.7
Census Tract 449.02 - North of the Whitewater River and East of Date Palm Drive*	----	----	21.0
Census Tract 450 - Between East and West Cathedral City Storm Drains south of Perez Road	----	----	----

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\* Includes areas outside the City limits.



## Special Needs Groups

Beyond the housing needs previously discussed for very low and low income households, elderly, migrant workers, military families, handicapped, students, minorities, single parent, farmworker and female-headed households often face special housing problems related to the size of their dwelling, the cost of the unit available to them, and the location of their housing. Unfortunately, these special needs are unlikely to be resolved by the natural working of the housing market system unless special efforts are made. Two of these groups, elderly and minority households, are well represented in Cathedral City and are discussed in this section. The other groups were determined not to have a large enough population in the City to be classified as special needs groups. For example, less than 1.3 percent of the households are farmworkers in need of assistance; and 55 households are headed by females below the poverty line. These groups are important and need assistance; yet, there are other groups at this time that need more help.

Of the special groups in need of housing assistance, the elderly is one of the most severely impacted groups. The problems they face include deteriorating or unsound units, the rising cost of housing and finding housing in areas suited to their needs. The elderly are generally on fixed incomes and often have health problems which restrict their activity. Eighty-six percent of the elderly have some chronic illness, while about 18 percent of the non-institutionalized have some significant limitation on their mobility.<sup>1</sup>

The elderly usually own homes for long periods of time. Although their homes may become unsound, they are reluctant to move because they have little or no housing payment. Also, moving can create severe hardships on them.

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<sup>1</sup> National Center for Health Statistics, "Health in the Later Years of Life" (U.S. Government Printing Office, 1971).



The housing characteristics of the elderly are influenced by their lack of income and their inability to do repairs or to pay to have repairs done. According to a HUD survey<sup>1</sup>, elderly-headed owner households made or had significantly less maintenance related work done than younger households. The problem is compounded by the fact that the elderly generally reside in older neighborhoods.

TABLE 10

Cathedral City Housing Problem Areas<sup>2</sup>  
(1976 and 1978 Sources)

<u>Area</u>	<u>Problems</u>
Census Tract 447 - North of Ramon Road and West of Whitewater River*	Overpayment, a Low Vacancy Rate
Census Tract 448.03 - South of Highway 111 and West of West Cathedral City Storm Drain*	None
Census Tract 449.01 - North of Perez Road, between Date Palm Drive and the Whitewater River to the railroad tracks.	Overpayment, Low Vacancy Rate
Census Tract 449.02 - North of the Whitewater River and East of Date Palm Drive*	Overpayment
Census Tract 450 - Between East and West Cathedral City Storm Drains south of Perez Road	Overpayment Low Vacancy Rate

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<sup>1</sup> Source: Riverside County Housing Element, August 1980

<sup>2</sup> 1974 Annual Housing Survey, 1974. Information is based on national statistics.

\* Includes areas outside the City limits.



Repairs or maintenance often needed to keep the housing unit from deteriorating are not made and entire neighborhoods fall into disrepair.

Another important concern that elderly households face, is their need to be conveniently located near social, transportation, and commercial services. As the health and economic situation of the elderly household worsens, mobility and service choices become restricted. Any housing program or strategy designed to satisfy the needs of the elderly must take into account the location, transportation, health and income problems of the elderly in order to adequately respond to their needs.

The housing needs of minority groups pose another special set of problems. First are the ramifications of poverty. Latinos and Blacks constitute the dominant minorities in the county, but are not equally represented in the working labor force and income distribution.

Latino residents accounted for 13.2 percent of the total unincorporated population, but comprised only 6.1 percent of the working labor force according to statistics from the 1978 Special Census. Blacks constitute 4.1 percent of the population and only 2.9 percent of the working labor force.

Income statistics from the 1978 Special Census indicated that 52.5 percent of the households in the County headed by an Anglo earned less than \$12,000 per year. Latino headed households had 65.5 percent and Black headed households had 65.7 percent earning less than \$12,000 annually.

Compounding the obvious difficulties generated by inadequate income is the additional problem of racial discrimination which has often blocked access of many minority families to standard housing of any type. This means that in estimating total housing need, special attention should be given to minority needs unrelated to factors of income. These needs constitute the "repressed demand" of minority households that desire and are able to afford housing, but are not competing in the housing marketplace because of actual or potential discrimination.

These two special needs groups, elderly and minority households, are currently well represented in Cathedral City. Demographic statistics indicate that 22.6 percent of the reported 1980 population of the City was 65 years of age or older. Only 17.9 percent of the population fell into this age group in 1970. If this growth continues at the historical rate, the 65



and over age group will be approximately 25 percent by 1985 and over 30 percent by 1995. The average annual growth rate used in the forecast is 6.6 percent.

TABLE 11

Elderly Population

	<u>1970</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Total Population	7,326	11,096	14,124	17,028
Pct. over 65	17.9	22.6	24.4	28.0
Elderly Population	1,315	2,502	3,451	4,760

No information is currently available to indicate the number of households within which this elderly population is distributed.

The minority population has also been increasing over the past several years. The statistics for non-white population has increased from 3.4 percent in 1970 to 13.3 percent in 1980.

It should be noted that this statistic underestimates ethnic minority population because some such persons consider themselves racially white. In 1980, for example, the non-white population was reported as 13.3 percent, as mentioned above, while ethnic minorities were reported to be 21.9 percent of the population. The non-white statistic is used because historical values are available.

Estimating the future non-white population by extending the trend of the past decade leads to very large fractions of the total population. Instead, the forecasts envision a numeric doubling every five years. Even so, the numbers forecast below perhaps should be considered maximums. The actual share of population will probably be smaller because the historical average annual growth rate of 19.5 percent cannot be sustained, nor is it likely that even a simple doubling every five years can continue.

Non-White Population

	<u>1970</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Total Population	7,326	11,096	14,124	17,028
Pct. Non-White	3.4	13.3	20.9	34.7
Non-White Population	249	1,476	2,952	5,904



Again, no information is available to indicate the number of households represented by these population statistics.

In any event, this portion of the population is clearly going to become more significant through time, and associated housing issues will remain an important aspect of the housing element.

#### Housing Market Characteristics

Recent trends in new home prices have shown a marked decrease in the number of homes selling in a range that is affordable to the average buyer. As discussions in this section point out, there are large groups of people excluded from the housing market because of these high prices. Not only are minorities, large families, and young couples being forced to find other market alternatives, but the "average" home buyer in Riverside County and Cathedral City is finding it increasingly difficult and sometimes impossible to find affordable new housing to meet their needs.

Median prices for unsold new housing were \$118,314 for detached homes and \$140,539 for attached units in the desert area of Riverside County as of May 1982.<sup>1</sup> These prices are not particularly representative of home prices in Cathedral City which are probably less because of the much higher home prices in neighboring cities included in the survey area (i.e., Palm Springs, Palm Desert and Rancho Mirage); however, they do provide examples of how the cost of home ownership has escalated. The Index of Home Ownership Cost in the Los Angeles Metropolitan area was calculated to be 381.4 in July 1982.<sup>2</sup> This index was 231.9 in 1978 and 319.8 in 1980; thus the current figure represents increases of 64.5 percent since 1978 and 19.3 percent since 1980 (1967 = 100).

Rehabilitation of existing housing stock is an alternative to new home purchase. This alternative has not been utilized to provide a significant source of affordable and desirable housing amidst sky rocketing new home prices.

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<sup>1</sup> Source: "Real Estate and Construction Report"; Real Estate Research Council of Southern California, 1982.

<sup>2</sup> Ibid



Most people generally prefer newly constructed homes as their largest investment, although rehabilitation could lower the cost of affordable housing substantially. Many owners of existing units are reluctant to rehabilitate their needs due to the reassessment of their property and a possible increase in their property taxes. Commercial loans provided to homeowners for rehabilitation are probably subject to the same forces of income eligibility, redlining, and discrimination as the home purchase loans. Interest rates for rehabilitation loans are generally much higher than the interest rate for home buying loans.

Housing which would be suitable for rehabilitation is often occupied by elderly persons who are reluctant or unable to undertake such a task, or it is rental housing, the improvement of which is uneconomical from a landlord's perspective. One further problem is that such rehabilitation is undertaken on a single lot basis and without similar investment in adjacent properties; the capital appreciation of a single lot rehabilitation cannot be realized.

Finance costs have recently accounted for a dramatic increase in the cost of home ownership. The effective mortgage rate in the Los Angeles metropolitan area rose from approximately 7 percent in 1970 to 12 percent in 1980. The rate averaged over 13 percent in 1981. The increase in the cost of owning a home in Riverside County is illustrated in Table 11 following.

The total cost of the median priced home financed over 30 years at 12 percent would be \$262,036. The total financing cost would be \$218,160; taxes and insurance would total \$29,160 and the down payment costs would be \$14,716. Decreasing the financing charges from 12 percent would greatly reduce the monthly costs to the home buyer. Lowering the interest rates to 7 percent would result in a substantial savings in the monthly payment from \$687 to \$473, a decrease of 31 percent. Using HUD's "affordability" guidelines, this would mean that the annual median income necessary to support the median priced house would decrease from \$32,976 to \$22,704 thus increasing the number of households able to purchase that house. It should be noted that in the current market, a rate of 12 percent would be welcome, interest rates having been 15-16 percent recently.



The problem remains that there are few houses under the median price of \$73,582 available to families earning less than the required income. Applying the 1977 household income figures from the Special Census to the median home price for Riverside County in October 1977 reveals that only approximately 21 percent of the households could afford to buy the median priced home. Since that time, housing prices have increased faster than income, and with higher mortgage rates, the percentage of households able to buy the median priced home today is even less. This is a considerable contrast to 1970 when 82 percent of the County households could afford to buy the median priced home.



Table 12

Changes in the Cost of Owning a Home in Riverside County  
April 1970 and April 1980

April 1970

Median Home Price	\$22,842
20% Down	4,568

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Loan Required	\$18,274
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Mortgage Payment (7% Interest, 30 years)	\$122/Month
Taxes and Insurance	38/Month

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Total Housing Payment	\$160/Month
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Income Required - \$7,680

April 1980

Median Home Price	\$73,582
20% Down	14,716

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Loan Required	\$58,866
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Mortgage Payment (12% Interest, 30 Years)	\$606/Month
Taxes and Insurance	81/Month

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Total Housing Payment	\$687/Month
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Income Required - \$32,976

Sources: Insurance rates from Farmers Insurance Group, September 1979, Loan amortization factories from Safeco Title Company

Riverside County Housing Element, August 1980



Utility rates have added an additional cost in the payments for a home. The utility costs are expected to increase sharply with shortages in energy supplies and deregulation. The Public Utility Commission estimates that total utility charges are increasing as much as 10 percent per year. In some instances of all-electric homes, energy cost can be the second major economic drain on a household aside from the mortgage. New energy efficient homes are capable of being built which realize up to 80 percent energy efficiency. This can increase the amount of income left over for the mortgage payment.

Proximity to work is one indicator commonly used to locate where hardships occur in finding adequate housing or affordable housing. The ideal is to be located within a few miles of work in an appropriate housing unit that fits the needs and budget of the worker. If housing near work centers is too expensive for the type of worker employed in that work center, the worker must seek less expensive housing farther from his job. Also, if the housing available near the job is in disrepair or of inadequate size or quality, the worker will seek affordable and sound housing in areas away from his place of employment. Cathedral City has traditionally been the provider of affordable housing to those who work in the large service sector of the resort industry of adjacent communities. This industrial sector is characterized by high minority employment and relatively low wages which is evident in the demographics of the City.

Another source of affordable housing opportunity is the mobile home which, as previously mentioned, constitutes a large proportion of the available housing stock in Cathedral City, as well as unincorporated Riverside County.

The cost of a mobile home depends upon the size, quality, brand, and number of extras in the unit. New units range from \$15,000 to \$25,000 for a single-wide (12' x 60') to \$50,000 and up for large multi-wides. Space rental costs range from \$100 to \$500+ per month depending on the park location and services provided.

Most of the mobile homes in the County and those in Cathedral City are located in mobile home parks. These parks are usually designed for quiet, convenient living and may also include amenities such as security guards and recreation facilities with swimming pools.



Mobile homes are especially appealing to retirees and small families because of the low cost, low maintenance needs, comfort, and small floor area ideally matched to their lifestyle and family size. Most of the mobile home parks cater to the needs of these groups and restrict the parks to adults only or adults over 45 years of age. The Federal Home Loan Bank surveyed mobile home parks throughout the County in March 1979 and found a vacancy rate of only 2 percent demonstrating the popularity of mobile home parks.

Considering the low vacancy rate and the age restrictions attached to mobile home park living, it is evident that families with children and young couples may have a difficult time locating mobile home housing. To complicate the problem further, mobile homes which can house large families compare closely in price to conventionally built housing. Although mobile homes are a viable alternative for many, they normally do not provide a satisfactory alternative to large, lower income families.

Recently action by the Federal Home Loan Bank has liberalized the lending regulations on mobile homes to the point that financing will greatly resemble that of conventional homes. The Board approved the financing of new and used mobile homes up to as much as 90 percent of the total cost. This total cost includes freight, itemized set up, sales tax and local fees applied to mobile homes. The Manufactured Housing Institute estimates that this action will reduce down payments by as much as 10 percent. The Board also lengthened the maturity term on mobile home loans to 20 years on both new and used units. In order to provide an increased money supply, in light of these new regulations, the Board will allow federal savings and loan institutions to increase the amount of total assets tied up in mobile home loans from 10 percent to 20 percent.

The availability of long term financing demonstrates the durability of newly constructed units. Long term durability has been a problem with units constructed 10 or more years ago. These older units and older parks which constitute the majority of the mobile home segment of the housing stock of Cathedral City do not currently provide an alternative for good quality, safe affordable housing. At the other extreme, relatively luxurious mobile home parks involve

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<sup>1</sup> Riverside County Housing Element, August 1980.



high unit values and space rent, responding to a notably different market. This rather unsuccessful long term experience with such parks should not exclude new development of mobile home parks, but should help identify standards which can be used to maintain the long term viability of mobile home parks as an affordable housing opportunity.

Modular housing, which is growing rapidly in popularity, is another alternative to conventionally built housing. In Riverside County, modular housing requires the same permits, is permitted in the same zones and receives the same treatment as conventionally built housing. Based on data obtained from the California Manufactured Housing Association, modular housing costs range from \$5 to \$13 per square foot less than conventional housing, which could result in substantial savings. As the public comes to accept modular housing as an alternative to conventional housing, there should be an increase in the number of these units being built in the near future.

Some constraints to modular housing which need to be overcome include building industry opposition to this new form of housing and myths regarding the inadequacy of construction and its detracting from neighborhood character.

Increased density in the form of multiple family housing units is another alternative to reduce housing prices. Multiple units comprise approximately 20 percent of the existing housing stock in Cathedral City which is very close to the multi-family share of all housing in Riverside County as a whole. By placing more units on an improved lot, the lot improvement and land costs can be distributed over the greater number of units reducing those costs to each resident. This housing type is most often found in urbanized areas where service and infrastructure can accommodate higher density development and where land costs are significantly higher.

c. Needs

Housing Growth

The data used to project population and housing needs is the 1982 SCAG Growth Forecast Policy. SCAG 82 is based on seven basic policies:



- 1) Encourage growth on a regional scale to occur in a balanced manner, both
  - within and adjacent to existing urban areas, especially those in need of recycling and in areas with underutilized infrastructure (i.e., transportation systems, utilities, schools, private investment, etc.);
  - and in currently urbanized areas where the pattern of development is carefully balanced related to major infrastructure and public facilities, and where environmental impacts are substantially mitigated.
- 2) Encourage growth on a subregional scale to take place in a concentrated, compact form (i.e., at moderate densities and in clusters and centers). This is intended to promote community identity, avoid overdependence on very high densities and avoid excessive recycle rates.
- 3) Improve the balance of commercial and industrial development and overall employment growth with the population levels and growth of each subregion. This policy is intended to provide the opportunity for people to live and work in the same community in order to reduce the overall number and length of trips and to promote social and economic viability within each subregion, while also retaining the economic basis of the older urban areas and forestalling the deterioration of the inner City.
- 4) Preserve the natural resources and open space areas identified in locally adopted plans, particularly where they are regionally significant and, where possible, those identified in SCAG's Conservation and Open Space Plan. Preserve, wherever possible, prime and potentially prime agricultural lands and open space areas separating communities.
- 5) Limit or use special design requirements for urban development of lands designated by local governments as having low suitability for development, such as areas with steep slopes or areas with high fire, flood or seismic hazards.
- 6) Phase development according to the availability of adequate public and private services and facilities, and strive for timely infrastructure support for planned growth.



- 7) Support SCAG's Housing Program calling for a balanced distribution of housing types within each subregion, and SCAG's Regional Transportation Plan calling for increased transit use.

Based on these policies, SCAG has forecasted population and the number of housing units by Regional Statistical Area (RSA) to the year 2000. These statistics are then disaggregated into five year increments beginning with 1980.

There are several problems inherent in the RSA projections. First, they are based on specific growth policies and assumptions. Policies and assumptions which differ from SCAG's can generate forecasts which vary substantially. For example, there have been studies conducted by marketing consultants in some areas, using different growth assumptions, which forecasted measurably different growth rates than SCAG's. Secondly, the SCAG forecasts are generated by forecasting regional totals and then distributing county and city totals by RSA. As the forecasts are broken into smaller areas, accuracy decreases and disagreement among forecasts becomes difficult to resolve.

SCAG uses their population forecasts in the development of their regional planning programs including Housing, Air Quality, 208 Water Quality, Transportation, and the A-95 Review Process. The 208 Program includes population forecasts which will be a factor used to determine the sizing of sewage treatment facilities.

Cathedral City is located in RSA 52 which contained approximately 66,000 dwelling units in 1980, more than ten times the number within the City. Estimates of the growth of the City will be made assuming the City's share of total housing units will remain constant. Although this is a reasonable assumption, it is also an arguable one. For this reason, the forecasts in this element should be used not as absolute, but as an indication of future growth potential.

Table 13 presents an overall growth forecast for Cathedral City. Population and Housing are forecast based on a continued constant share of the regional growth expected under SCAG-82. Employment has been forecast using assumed employment/population ratios applied to the population forecast. These assume a very small increase in the employment as the commercial and industrial sections of the City develop.

To put these employment/population ratios into perspective, the regional ratio for RSA 52 was 0.37 in 1980 and is expected to decline to 0.35 by 2000.



Thus the current higher ratios for Cathedral City demonstrate the City's current status as an employment center/residential area for locally employed persons. This is one indicator of the fact that Cathedral City is impacted by the lack of affordable housing generally in surrounding cities.

The Households forecast was based on extending the 1970 to 1980 growth rate. These are the households of year-round residents only. As can be seen, the number of such households expressed as a percentage of total dwelling units is expected to decline in the near term. In the long term, year-round households are expected to stabilize at approximately 70 to 80 percent of total dwelling units.



Table 13

Cathedral City Growth Forecast  
(based on SCAG-82)

<u>Population</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
RSA 52	84,000	107,000	129,000	149,000	168,000
Cathedral City	11,096	14,124	17,028	19,668	22,176
Share of Reg. Pop.	13.2%	13.2%	13.2%	13.2%	13.2%
<u>Employment</u>					
RSA 52	31,000	38,000	47,000	54,000	59,000
Cathedral City	4,893	6,215	7,663	8,851	9,979
Share of Reg. Emp	15.8%	16.4%	16.3%	16.4%	16.9%
Emp./Pop. Ratios (City)	.44	.44	.45	.45	.45
<u>Housing</u>					
RSA 52	66,000	83,000	100,000	115,000	130,000
Cathedral City	6,153	7,738	9,322	10,721	12,119
Share of Reg. Housing	9.3%	9.3%	9.3%	9.3%	9.3%
<u>Households</u>					
Cathedral City (year-round)	4,188	4,999	5,968	7,124	8,504
<u>Income Group</u>					
Very Low (27.9%)	1,170	1,395	1,665	1,988	2,373
Low (13.8%)	579	690	824	983	1,174
Moderate (16.6%)	696	830	991	1,183	1,412
Upper (41.7%)	1,743	2,084	2,488	2,970	3,545
Pct. year-round (of total due)	68.1%	64.6%	64.0%	66.4%	70.2%
Size	2.65	2.83	2.85	2.76	2.61



The forecast of income groups has been done using the current distribution applied to forecast total households statistics. It should be remembered that these estimates also include only year-round residents.

#### Depreciation of Existing Stock

Demolition of existing housing has historically had little impact on the housing market in Riverside County. This is due primarily to the availability of large tracts of undeveloped land which does not allow a large enough increase in the price of land. Only with increased property values is it economically feasible to replace older units with new ones which provide a sufficiently greater return on investment. This pattern is currently typical of Cathedral City, but the advent of increased commercialization along the City's main highways, plus the prospect of increased densities in adjacent areas, suggests that marginal units may be converted in use or demolished at greater rates.

The housing removals are usually units in need of major repairs. In some cases, the units have been vacant for a long period of time. In other cases, the units are occupied by tenants who file complaints with the Building Department of code violations when rents are raised and repairs are not made. The County forecasts removals to average approximately 100 units per year. Assigning an average share to Cathedral City yields an estimate of six removals per year. As previously indicated, this figure may prove to be low in the future.

This number of removals is relatively insignificant when compared to the total stock, but when a unit is demolished it is generally a low cost unit in need of substantial repair. Since the unit is usually replaced with a moderate to high cost unit, low cost housing is eliminated.

Unsound conditions, which eventually leads to demolition if left unchecked, is often a factor of age. By 1985 approximately 30 percent of the units in the County will be 30 years of age or greater. These are usually energy inefficient units which require substantial maintenance. Many of them have the potential to become dilapidated as a result of neglect or lack of repair. SCAG estimated 8 percent of the County housing stock to be unsound in 1978. The potential for 1990 is 19 percent of the total. If applied to Cathedral City, these percentages would very likely underestimate the extent of the problem.



### Projected Housing Mix

The General Plan Land Use Element proposes the following mix of residential land uses: Low Density Residential (2-4.5 du/ac) 25%; Resort Residential (3-6.5 du/ac) 28%; Medium Density Residential (4.5-8 du/ac) 34%; and High Density Residential (8-24 du/ac) 13%. The latter two categories, comprising 47 percent of all residential units, provide opportunity for development of new housing which is affordable by a large cross-section of the community. It is expected that as the City urbanizes, mobile homes will represent a smaller proportion of the housing stock because of their relatively inefficient use of land which will become a more valuable commodity. Multi-family units of modular or conventional construction are expected to become the primary "affordable" housing opportunity.

### Regional Housing Needs

From a regional point of view, housing problems vary from county to county. One county may have a shortage of low and moderate housing to meet the regional demand for units while another county may have a greater need to rehabilitate deteriorating units. SCAG's Regional Housing Allocation Model (RHAM) addresses these subregional needs for the jurisdictions within Southern California. Specifically, the needs identified in the RHAM are:

- 1) the number of lower-income households needing assistance (unmet housing needs based on the income criteria used by HCD - paying no more than 30 percent of household income on housing);
- 2) the "fair share" adjustment allocating affordable units to jurisdictions within the SCAG region (based on proximity to jobs, ability to provide public services and facilities in support of housing, and local income distribution compared with income distribution within the region);
- 3) total need, households needing assistance plus the fair share adjustment;
- 4) the number of housing units needing rehabilitation

The 1981 RHAM identifies a current need of 18,628 for unincorporated Riverside County. These units are distributed entirely into the low income group.



Unlike some of the other areas of the region, the unincorporated portion of Riverside County has a zero "fair share" allocation based on analysis by SCAG. This means that within the Southern California region, the unincorporated portion of Riverside County should concentrate its efforts on meeting the housing needs of its existing residents. Those jurisdictions with a positive fair share should not only be meeting the needs of their existing residents, but have the capabilities and responsibility to meet the housing needs of persons living outside their jurisdictional boundaries. Many cities within the region have been identified with a positive "fair share". In Riverside County, Indian Wells, Norco, Palm Desert, Palm Springs, and Rancho Mirage are positive "fair share" cities. Cathedral City presently has a zero fair share allocation along with the County. The City's share of that total current need can be estimated, using a constant percentage factor, as 1,297 units.

In addition to the current need, a growth need must also be met over the next few years. Table 14 presents the growth need for the City using the RHAM report. A relatively small growth need is calculated due primarily to the fact that the vacancy rate in 1988 is estimated to be 4 percent (following the RHAM) while the current vacancy rate approaches 7.6 percent (available). Thus a considerable fraction of anticipated growth can be accommodated in existing vacant dwelling units. However, no data is available regarding the price distribution of the vacant units. That distribution may not correspond to the income levels of future residents. Thus a larger number of units may be necessary to insure that a sufficient housing supply exists for all income levels, thus maintaining a relatively high vacancy rate. This can only be verified when current, dependable housing cost and income distributions become available.

The historic growth in Cathedral City has been approximately 240 units per year since 1970. While recent development activity has been extremely slow, there is a reasonable prospect that, with the City's orientation toward growth combined with its relatively healthy economy, development may regain a similar rate over the next five years. That would represent a total increase of 1200 dwelling units. While that is only seventy-five percent of the total need (existing plus growth), it does take into account the distressed housing situation during the last two to five years. It therefore represents a reasonable possibility.



Table 14

RHAM ALLOCATION OF NEED - 1983  
CATHEDRAL CITY

		I N C O M E   G R O U P S				
		<u>Total</u>	<u>Low</u>	<u>Low</u>	<u>Moderate</u>	<u>Upper</u>
1)	1983 households	5,056				
2)	Households added, 1983 to 1988	1,573				
3)	1984 households	6,629				
4)	1988 vacancies goal	257				
5)	Current vacancy	440				
6)	1983 dwelling units	7,264				
7)	Construction needs to replace loss	<u>0</u>				
8)	Construction need for growth	1,390				
9)	Future housing needs (regional income dist.)	1,390 100.0%	232 16.7%	327 23.5%	263 18.9%	568 40.9%
10)	Future housing needs to avoid impaction	1,390 100.0%	271 19.5%	343 24.7%	234 16.8%	541 39.0%

d. Opportunities/Constraints

Government actions, policies, funding limitations, and attitudes combine to impact the cost of housing and the availability of appropriate housing for all segments of society. In addition, the housing market and physical features of the City provide both opportunities and constraints. This section assesses some of the opportunities and constraints that may affect the cost of housing as well as the City's ability to respond to housing problems.

Conflicting Governmental Responsibilities\*

Facilitating the development of low and moderate income housing is only one of many services for which local governments are responsible. A community must also plan for environmental quality, neighborhood character, growth management, and other concerns of present residents which can often work at cross purposes with the provision of low cost housing. Many times public officials are faced with situations where a trade off must be made between conflicting concerns for the betterment of the community.



Cathedral City has demonstrated a strong desire to continue to meet the housing needs and solve the housing problems of its residents. This will insure future decisions which reflect a commitment to housing while providing for other needs of the community.

#### Inadequate Political Support\*

Historically, federal agencies, financial institutions and developers have worked together to provide housing. Local government involvement has been minimal or nonexistent. When faced with inflation, unemployment, discrimination, poverty, high financing costs and a less than sympathetic general public, local elected officials are hard-pressed to identify and implement suitable housing programs aimed at meeting the needs of low and moderate income families. Consumer advocates speaking on behalf of low and moderate income housing have been few in number and relatively unorganized, and public officials may see minimal political support for low income housing programs within the community. Faced with the post-Proposition 13 budget constraints, local officials view the provision of low and moderate income housing as even less politically feasible than in the past.

As discussed above, the administrators of the City and the community as a whole have expressed their desire to provide adequate housing for all economic segments of the community. This somewhat unique situation can allow local government to actively participate in housing programs without the typical fear of widespread political repercussions within the constituency.

#### Proposition 13

Proposition 13, the property tax-cut initiative passed in June, 1978, has had mixed effects on the cost of new and resale housing and apartment rents. Proposition 13 has provided substantial tax savings to people who continue to own their home from pre-Proposition 13 days. For these people, property taxes have decreased by approximately two-thirds. This helps the people who already own homes; however, the people who are trying to buy homes now or are renting

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\* Sections from Draft Coachella Valley Regional Housing Element, February, 1979.



have benefited very little. When a person buys a home, he generally purchases to the maximum of his financial ability, and carries the maximum monthly payment that his budget allows. Proposition 13 reduced the cost of housing by lowering property taxes; but these gains were temporary at best, and now the cost increases for new and resale homes far outstrip cost benefits from Proposition 13. They, in fact, have had a negative net affect on the price of new homes because of increased user fees and special fees, such as sewer hookup and school fees, initiated as income generators for these essential services.

Increased user fees, increased fees for processing permits, and increased special district fees are a direct result of property tax limitations placed on jurisdictions responsible for providing services. Especially in a growth area where services are demanded to facilitate new development, these fees will be high. As these user fees and special district fees increase, so increases the price of a new home, closing the door a little tighter on those first entering the market, those on fixed incomes, and those earning less than what is required to purchase homes at today's prices. Again, Cathedral City is consciously attempting to minimize this aspect of cost.

#### Development Application Processing

Today a land development project is an expensive and time consuming process. It is not unusual to find houses being built several years after the tentative applications were submitted. While patterned after the previous Riverside County process in some ways, Cathedral City has made a transition from its early dependence on County procedures and format.

The City has an advantage in that it is a relatively small organization and just does not have the complicated procedural arrangements that the much larger and more diversified County maintains. Moreover, it can focus attention much more readily on projects within a concentrated City as opposed to an extremely large and varied County.

Moreover, the City leadership is interested in stimulating positive change within the City. The City's philosophy and policy toward growth and development is reasonable and straightforward. Consequently, not only is the system relatively uncomplicated, but it is an easy system to operate.



As a result, processing costs are relatively low and the General Plan policies are aimed at keeping increases to the minimum consistent with the long term quality improvement to which the City aspires.

The development application process is an area of opportunity for Cathedral City to encourage desirable development. Processing incentives can be developed to encourage the provision of housing that would not ordinarily be provided by the market. The development application process and the zone code (discussed below) are two primary vehicles which the City may employ to encourage specific development by incentive.

### EIR Process

The environmental process often adds to the costs of housing by delaying projects which may have a significant impact on the environment while an evaluation of the impacts is completed. While necessary by state mandate, this delay can raise the cost of homes because developers must continue to make payments on loans and interest during the evaluation.

By combining a Master Environmental Assessment (MEA) with the General Plan Program and preparing a comprehensive EIR on the General Plan itself, the City has reduced the environmental documentation that most projects will require. Future development proposals that are consistent with the General Plan will only need to address site specific environmental impacts while regional and growth issues can be addressed by reference to the General Plan related documents. This procedure will streamline the EIR process and reduce the time and cost requirements to project sponsors.

### Lot Sizes and Other Development Requirements

As a newly incorporated City, Cathedral City has the opportunity to reduce these constraints in the adoption of a new Zoning Ordinance. This ordinance can be designed to provide inducements for affordable housing or other development the City may wish to encourage. The Land Use Element has identified the Specific Plan and density bonuses as mechanisms to provide such development. The ordinance will implement these and provide a vehicle for other development management techniques.



## Infrastructure and Services

The problems associated with the provision of affordable housing are especially acute in areas where infrastructure and services are either non-existent, overcapacity or extremely expensive to extend. Such areas cannot provide the services necessary to handle the same type of high density development that urbanized areas can handle.

## Housing Program Constraints

Many constraints affect the City's ability to use available housing assistance programs. One problem area is in the complicated funding and administration procedures of programs legislated by the state and federal governments. Another difficulty exists in coordinating these programs.

Funding for housing programs is provided through different agencies of different levels of government. It is possible to seek housing assistance funds from the Department of Housing and Urban Development (HUD), the California Housing and Finance Agency (CHFA), and the Farmers Home Administration (FmHA). Each agency requires separate applications and asks for different kinds of information. This duplication of effort increases paperwork and staff time and increases the overall operating and administration costs associated with grant application.

At the County level, there is an agency or office designated as the coordinator of all available housing assistance programs. This is a major constraint which leads to problems with program coordination and duplication of effort at the local level. Because there is no united effort to improve housing conditions and to provide innovative approaches to the housing problems, the people living in sub-standard, overcrowded, and unaffordable housing suffer. By coordinating these efforts at the local level, the City can be more effective and successful in obtaining housing program assistance.

Beyond the constraints mentioned above, it must be noted that not all programs are funded at any given time, thus hampering program coordination. Funding changes are sometimes abrupt and may be disruptive because of the result of shifts in political priorities at the state or federal levels.

Lengthy processing times and permit approvals by government agencies has, in the past, delayed public housing projects causing interest payments and building costs to rise. As in the private sector, these



projects face contract deadlines, high monthly interest rates, and rising inflation - all combined to boost the cost of projects if there is a time delay. Thus, the low-cost housing project that has these problems cost more to build than may be feasible under program guidelines. Again, coordination of approvals at the local level would be more easily achieved in the smaller administration of the City.

The current housing market is also a constraint for the successful implementation of a worthwhile housing element. The rising cost of land and construction in the Southern California region makes affordable housing an unreachable goal for more and more households. Although land costs tend to be cheaper in Cathedral City than in Palm Springs or Rancho Mirage, they still constitute a large portion of the total housing costs. Interest rates are another facet of the housing market and they have a great deal of influence on the affordability of housing. Presently interest rates are down from what they were a few years ago, but a further drop would be very beneficial to the housing market.

#### Referendum Requirements for Public Housing Projects

As required by Article 34 of the California Constitution, local jurisdictions must obtain voter approval before developing, constructing, or acquiring low rent housing projects. In the County of Riverside, voters have turned down public housing projects in the Cities of Riverside, Norco, Indian Wells, and Rancho Mirage. All other jurisdictions and all of the other population centers in the unincorporated areas of the County currently possess Article 34 referendum authority.

#### Data Constraints

The job of assessing housing needs and the programs designed to address those needs is a very difficult task involving many hours of data collection and analysis. As is evident in the assessment portion of this document, to do a proper analysis of housing problems, several data sources are frequently used which can produce inconsistent results. The City can initiate a program of consistent results. The City can initiate a program of consistent record keeping which will help to alleviate this problem in the future. Although this will require a slight increase in time and energy devoted to City administration, the future value of such an investment could be considerable which such records are readily available.

Considering all of the constraints which may affect the quality of housing data, it is clear that most



statistical data should be viewed as an indication of a problem rather than representing the actual problem in definite numbers. They are estimates and approximations of what the real conditions are thought to be. In this context, housing programs should be designed with these constraints in mind.

#### Available Land

Cathedral City is fortunate to have a good stock of available land for future development. This General Plan designates 5,660 acres for general residential uses plus an additional 1,355 acres in the Open Space-Residential category. Currently, 3,670 acres are established for residential uses. Of this amount, approximately 750 acres are subdivided but remain essentially unbuilt. This acreage is located north of Ramon Road. Thus approximately a total of 2,740 acres are available specifically for new residential use. These are broken into the density categories of the General Plan in the accompanying table.

As is evident in the table, the Plan proposes to increase the average density in the City, potentially resulting in lower housing costs as land and improvement costs are distributed to a large number of units. The potential units represented by the acreage figures are also presented in the table. As is evident in examining the dwelling unit counts, the allocation for residential growth in the General Plan is considerable. Actual development is, of course, constrained by infrastructure improvement needs and market forces described elsewhere in this document.

The vast majority of the land, the development potential of which was described above, is flat and stable, well suited for development. The quantity and quality of land available for development is a tremendous opportunity for the City to implement affordable housing along with other types of market rate housing, providing housing to all economic groups.

Moreover, the density ranges proposed in the Plan, combined with the Density Bonus Program make the potential for cost-effective development of the land much more probable than under the current General Plan.



Table 15

Land Available for Residential Uses  
by General Plan Category

	Density Range	Existing	Pct	Proposed	Pct	Expansion Area	Potential Units		
							Minimum	Median	Maximum
Very Low Density Residential	.2	1,195*	40%	0		-1,195**	-239***	-239	-239
Low Density Residential	2-4.5	867	30%	1,891	33%	1,024	2,048	3,328	4,608
Resort Residential	3-6.5	424	15%	1,664	29%	1,240	3,720	5,890	8,060
Medium Density Residential	4.5-10	416	14%	2,058	37%	1,642	7,389	11,904	16,420
High Density Residential	11-20	<u>18</u>	1%	<u>47</u>	1%	<u>29</u>	<u>319</u>	<u>450</u>	<u>580</u>
		2,920 Ac		5,660 Ac		2,740 Ac	13,237 DU	21,333 DU	29,429



## Housing Market

As discussed previously, the current regional housing market does not provide housing which is affordable to the majority of households. The market conditions within Cathedral City, however, are more favorable than most.

Cathedral City has historically provided lower cost housing than neighboring cities. This situation has kept land values relatively low and makes the future construction of such housing much more likely. Cathedral City residents have come to expect basic housing without the water, recreation and other amenities of the private communities in adjacent cities. Because of this housing tradition, the housing market, as well as political and community attitudes, is aligned to provide significant amounts of lower cost housing in the future. Adjacent cities without this experience face a much more difficult task in providing such future housing.

While land costs are an important contributor to the cost of housing, they are more reasonable than in nearby resort oriented communities. Typical costs for residential lots in the Panorama area run between \$5,000 and \$10,000, but important improvements, such as sewer lines, must be installed before large scale development can occur. Residential acreage varies considerably in price, depending upon authorized density, location and extent of public facilities available. Individual lot costs can be expected to be somewhat higher than in the Panorama area, perhaps as much as two to three times for single family lots.

## Energy Costs

Increased energy costs can also create adverse housing conditions, especially inducing overpayment situations because of inefficient energy use. This problem can be doubly detrimental because it has its greatest effect on households in older structures which tend to be less insulated, have inefficient appliances and are more likely to be in a state of disrepair, all of which contribute to continued energy waste. Structures such as this also tend to be occupied by lower income persons who are attracted to them by generally lower cost of the structure itself, either in rent or mortgage payment. In this way, dwelling units which might otherwise provide an affordable housing opportunity fail to do so because the inefficient use of expensive energy resources results in an overpayment situation.



The General Plan recognizes these constraints on effective housing supply as well as opportunities which exist for energy conservation and their importance not only to housing but all types of development. This issue is addressed in the Energy Component of the Community Development Management Plan and the Special Conditions components of the Environmental Management Plan.

The opportunity for energy conservation and the utilization of alternative energy sources such as solar and wind generation, are discussed in the Energy Component. The programs listed in the component achieve implementation of conservation through building design and siting.

The Special Conditions Component notes the dry climatic conditions result in intense solar radiation and high temperatures which in turn place excessive demands on energy resources.

The utilization of solar energy to meet some of the energy needs of communities is now a topical planning issue. Previously little attention was given to the availability of solar energy to meet energy demands of development. The primary focus of attention for Cathedral City residents has been protection from the intense solar radiation and heat of the summer season. The consideration of solar access and protection can lead to increased efficiency and reduced energy demand. A policy is identified in this component to establish appropriate mechanisms to provide and protect solar access.

Efforts such as these will assist in establishing efficient energy use patterns within the City and, given ever increasing energy costs, contribute to affordable housing opportunities.

#### Summary of Constraints

The provision of adequate housing to solve the City's housing problem is constrained by many of the issues discussed in this section. The housing problem is multi-faceted and is impaired by both governmental and private market constraints. The constraints discussed in this section impede the City's ability to work out new strategies that require intergovernmental cooperation, allow for innovative building and development design flexibility and to deal with the regional pressure placed on the local housing market.

#### e. Objectives, Policies and Programs

The following policies have been devised from the Goals and Objectives for Housing discussed earlier



and the preceding Assessment Needs. These policies are designed to provide for the construction of new units, rehabilitation of unsound units, and the continued maintenance of existing units in good condition.

Two objectives are specified for each category: a descriptive objective and a quantified objective. The major thrusts are toward new units, rehabilitated units and maintenance of existing units. The descriptive version is an overall, long term objective. The quantified version is a five year objective. Related policies and programs are intended to achieve both objectives.

1a. Objective: Additions to the housing supply will include a complete range of housing available to low, moderate, median and higher income households and promote equal housing opportunities for all persons regardless of race, sex or religion.

1b. Quantified Objective: An objective will be to complete 240 new units in Cathedral City each year for the next five years with the following income pattern:

Very Low - 20% or 48 units

Low - 25% or 60 units

Moderate - 15% or 36 units

High - 40% or 96 units

1.1 Policy: The City will provide incentives to stimulate housing production generally very low, low and moderate income housing specifically.

1.1.1 Program: Develop and operate a density bonus system as reflected in the land use component. Target date - Now operational - Review effectiveness at first Annual Review, 1 year after adoption.

1.1.2 Program: Develop a procedure for negotiating Development Agreements with private developers. Target date - July, 1986.

1.1.3 Program: Develop standards for modular (Manufactured) housing on individual lots to facilitate their use in the City and add



provisions therefore to the appropriate City ordinances. Target date - January, 1986.

- 1.1.4 Program: Thoroughly evaluate and revise as necessary the City's development processing system to minimize time for all project review, giving priority to those projects offering very low, low or moderate income housing. Target date - January, 1986.
- 1.1.5 Program: Initiate cooperatively with the appropriate utilities an Energy and Water Conservation Program to develop cost-effective ways of reducing utility costs. Target date - March 1986.
- 1.1.6 Program: Adopt solar design guidelines to facilitate the use of solar energy in new housing developments. Target date - July, 1986.
- 1.1.7 Program: Enforce state construction standards for energy efficiency in new housing developments. Target date - Ongoing.
- 1.1.8 Program: Establish a phased five year Capital Improvement Program in order to make infrastructure available on a timely basis in areas not now served. Target date - January, 1986.
- 1.1.9 Program: Establish a plan for using redevelopment agency projects as prototypes for achieving more cost-effective housing. Target date - March, 1986.
- 1.1.10 Program: Train a community development staff member as a community resource person to assist the public in housing cost reduction techniques. Target date - July, 1987.
- 1.1.11 Program: Explore the feasibility of broadening the districts in which mobile homes are allowed. Target date - July, 1987.



- 2a. Objective: The current housing stock that is deteriorated or deteriorating will be safe, habitable, and architecturally pleasing.
- 2b. Quantified Objective: There will be an average of 10 unsound dwelling units per year (a total of 50) rehabilitated during the next five years, all in the very low, low or moderate income ranges.
- 2.1 Policy: The City will provide both the leadership and incentives to rehabilitate deteriorated housing.
- 2.1.1 Program: Conduct a survey of unsound dwelling units within portions of the City in which overpayment is the most serious housing problem and identify candidate units for the five year Rehabilitation Program. Target date - July, 1985.
- 2.1.2 Program: Pursue vigorously housing code enforcement. Target date - Ongoing.
- 2.1.3 Program: Develop and adopt an ordinance to regulate demolition of substandard housing units including provisions for occupant relocation. Target date - January, 1986.
- 2.1.4 Program: Develop and adopt an ordinance to regulate the conversion of apartments into condominiums. Target date - January, 1986.
- 2.1.5 Program: Train a community development staff member as a specialist in rehabilitation costs, techniques and procedures to work with owners of candidate units. Target date - July, 1987.
- 2.1.6 Program: Design a self-help rehabilitation program as an adjunct to or substitute for assisted programs. Target date - January, 1987.
- 2.1.7 Program: Continue to seek available state or federal financial assistance in consultation with



County, State HCD and HUD officials. Target date - Ongoing.

2.1.8 Program: Use Block Grant funds to assist with necessary improvements or finance loans related to rehabilitation projects. Target date - Ongoing.

3a. Objective: Existing dwelling units in a sound and architecturally pleasing condition will remain in said condition.

3b. Objective: All urban conservation programs under this objective will be established and functioning within three years from Plan adoption and a total of twenty existing units a year will be conserved.

3.1 Policy: The City will assist residents and owners in maintaining their residential property in sound condition.

3.1.1 Program: Develop a process whereby neighborhoods which commit to property maintenance efforts gain priority consideration for needed capital improvements. Target date - January, 1986.

3.1.2 Program: Hire or train a staff specialist to monitor housing conditions, advise homeowners on maintenance actions, counsel interested neighborhoods and advise the City Council on urban conservation needs and action programs. Target date - January, 1987.

3.1.3 Program: Establish a City sponsored Home Maintenance Counseling Program involving business community assistance and technical staff advice. Target date - July, 1988.

3.1.4 Program: Expand the Energy and Water Conservation Program (1.1.5) to include retrofit programs for existing structures. Target date - January, 1988.

3.1.5 Program: Explore and implement feasible sources of funding assistance and tax credit opportunities for those homeowners who



invest in basic structural improvements (not expansion). Target date - July, 1988.

4a. Objective: Handicapped or special need households will have housing opportunities within the City.

4b. Objective: The City will actively seek to provide an increased number of housing opportunities for its special needs residents during the next three years.

4.1 Policy: The City will assist those residents with special housing needs.

4.1.1 Program: Develop and adopt an ordinance which requires all development projects that displace existing very low, low or moderate income households to prepare and implement a Relocation Program to locate these households in housing acceptable to the City Council. Target date - January, 1986.

4.1.2 Program: Develop negotiating guidelines which allow the City to negotiate incentives with developers who build housing for residents with special needs. Target date - July, 1986.

4.1.3 Program: Sponsor advisory service for elderly, minority households, large family households and those who have serious overpayment problems, overcrowding or other unique needs, including relocation assistance. Target date - July, 1987.

4.1.4 Program: Seek out state and federal funding assistance programs, including particularly Section 202 project opportunities. Target date - Ongoing.

4.1.5 Program: Develop and implement guidelines and incentives to promote handicapped accessible units in new housing developments. Target date - Ongoing.



- 5a. Objective: The City will be aware and have documentation of housing related forecasts, conditions, needs and housing element implementation achievements.
- 5b. Objective: The City will have a housing element monitoring system designed within one year after plan adoption and operating within two years thereafter.
- 5.1 Policy: The City will monitor housing element performance and take corrective action as appropriate from the findings.
- 5.1.1 Program: Develop and implement a Housing Element Monitoring Program. Target date - one/two years after Plan adoption, respectively.
- 5.1.2 Program: Incorporate Monitoring Program findings into annual budget deliberations for appropriate redirection. Target date - January, 1987.
- 5.1.3 Program: Develop an Annual Review of current housing programs with appropriate action recommendations for City Council approval. Target date - July, 1986.
- 6a. Objective: The City will establish an efficient and coordinated Housing commitment to implement this plan.
- 6b. Objective: The City will establish a Short Range Action Program within the first year after Plan adoption.
- 6.1 Policy: The City will continue to use existing financial and personnel resources to achieve immediate capabilities dealing with housing problems.
- 6.1.1 Program: Evaluate existing resource capabilities and recruit and train additional staff if and when necessary. Target date - October, 1985 for evaluation; July, 1986 for initiating recruitment, if necessary.



6.1.2 Program: Develop a network to stay in touch with other housing officials and specialists, scheduling periodic workshops for Council, Planning Commission and staff to update their awareness of housing programs. Target date - January, 1986.

7a. Objective: The City will continue its active planning program for meeting its long term housing needs.

7b. Objective: The City will initiate a Five Year Action Program within the first year after Plan adoption.

7.1 Policy: The City will begin preparations for the next Plan update and begin identifying, documenting data required for verifying housing needs.

7.1.1 Program: Identify deficient data categories for the Plan update with the possibility of a special census to obtain needed data prior to the update. Target date - July, 1987.

7.1.2 Program: Investigate future state and federal funding opportunities and consolidate into a multi-year application strategy. Target date - July, 1986.

7.1.3 Program: Evaluate the City's entire land use administration process for possible efficiency and effectiveness improvements in terms of stimulating housing production in all income ranges. Target date - January, 1988.

### 3. REDEVELOPMENT COMPONENT

#### a. Scope

The purpose of this section of the General Plan is to define the needs for redevelopment within the City and to suggest applicable policies and programs to implement such redevelopment.



b. Existing Conditions

The City of Cathedral City has an authorized Redevelopment Agency and has devised redevelopment plans for Project Area 1. The need for redevelopment in Project Area 1 is immediately apparent. Generally speaking, this area is bisected by the Highway 111 corridor in an east-west direction from city limits to city limits approximately paralleling the highway and including the area slightly to the north and slightly to the south of this transportation corridor (see Exhibit 6 for location of Redevelopment Project Area 1). The General Plan incorporates by reference all of the Redevelopment Plan for Project Area 1 as developed by the Cathedral City Redevelopment Agency.

c. Needs

The needs for continued redevelopment are documented throughout the City. Areas of the City are old, poorly planned and in need of rejuvenation. The City has an image of a community with considerable substandard development. The pattern of development is random and does not represent orderly growth and development. In major portions of the City there are extensive subdivided areas which are sparsely developed and which are in need of substantial corrective work. A significant proportion of the existing housing stock is substandard or in disrepair. Other areas of the community have been impacted by special problems due to wind and sand transport. Large portions of the community are affected by an essentially substandard infrastructure of community utilities and services.

d. Opportunities/Constraints

The General Plan indicates vast areas of opportunity within the City for challenging redevelopment. The greatest of these opportunities and challenges that face the City is the further definition of progressive redevelopment areas throughout the north-south axis of the City. With an eye to giving better definition to these opportunities, the General Plan envisions an extension of redevelopment project areas (See Exhibit 6). The numbering is strictly for identification and does not imply sequence.\*

1) Redevelopment Project Area 1:

The General Plan would extend the southern boundary of this existing redevelopment project area to include those residential areas which are in a state of conversion at the present time, or to improve housing in this area up to and including "D" Street.



## 2) Redevelopment Project Area 2:

Project Area 2 is that area bounded on the south by Gerald Ford Drive, on the west by Date Palm Drive, on the north by 34th Avenue, and on the east by Plumley Road. This project area is identified as being affected by changing land uses, expanding commercial and in need of replacing and improving housing stocks.

## 3) Redevelopment Project Area 3:

This project area would be generally bounded by 34th Avenue on the south, the city limits on the west, Ramon Road on the North, and Date Palm Drive on the east, with an extension to the east which includes the existing subdivided area at the northeast corner of Date Palm and Ramon Road. This area is a mix of old residential, newly emerging residential and conversion commercial uses, including significant strip commercial along the frontage of Ramon Road. Extensive infrastructure upgrading is needed in this project area. The General Plan also calls for an extension of an arterial bypass system which would travel along the east side of the Whitewater River as an extension of Landau Road connecting ultimately to 34th Avenue as an east-west/north-south arterial bypass. Substantial land acquisition and right-of-way acquisition would be involved in the planning and development of this project area.

## 4) Redevelopment Project Area 4:

This project area exists to the north of Ramon Road. Its boundaries would be Ramon Road on the south, Landau Road on the West, Date Palm Drive on the east, and 30th Avenue on the north. This area is a previously subdivided and plotted area with a great number of lots of record. It is characterized by substantially underdeveloped land, extensive but poorly

maintained streets, and sewers. The completion of Landau Road as a part of the bypass on the western boundary of this project area would require significant land acquisition and right-of-way acquisition activities. This section of land is currently a mixture of residential and commercial and will be designed in the General Plan to include a greater variety of residential uses as well as a mixture of commercial uses. It is in this section that the ultimate relocation of the Civic Center for the City is planned.



#### 5) Redevelopment Project Area 5:

This area is bounded on the south by Ramon Road, on the west by the city limits along the extension of San Joaquin Road, on the east by the west bank of the Whitewater River. It generally contains the area known as the Dream Homes and the commercial portions of the City along Ramon Road in that area. This area is in need of improving the housing stock and making portions of the land developable through blow sand control and drainage for resolution of drainage problems.

#### 6) Redevelopment Project Area 6:

This project area is bounded on its south by 30th Avenue, on the west by Landau Boulevard, on the north by Vista Chino, and on its eastern boundary by Date Palm Drive. This project area has been the subject of substantial sand transport and blow sand impact throughout its development history. It is deficient in control of the blow sand and the infrastructure providing the utilities to the area. Significant among these is the need for repair of the street system and upgrading the water system. This area is identified under the General Plan as a conversion area from total low density land uses to a mixture of low density and medium density uses, including specific commercial uses at the northeast corner of the project area.

#### e. Objectives, Policies and Programs

1. Objective: The use of land and pattern of development will be efficient and productive.

- 1.1 Policy: The City will utilize redevelopment powers to eliminate blight and enhance the viability of commercial, industrial and residential uses and public facilities in support of them.

- 1.1.1 Program: Prepare implementation plans for Project Area 1 and evaluate adjacent areas to the south for possible inclusion in the project area.

\*Please note that the numbering sequence of Project Areas as shown in this document only serves to identify particular areas and does not necessarily correspond to existing or future Redevelopment Project Area numbers.



# REDEVELOPMENT/ REHABILITATION

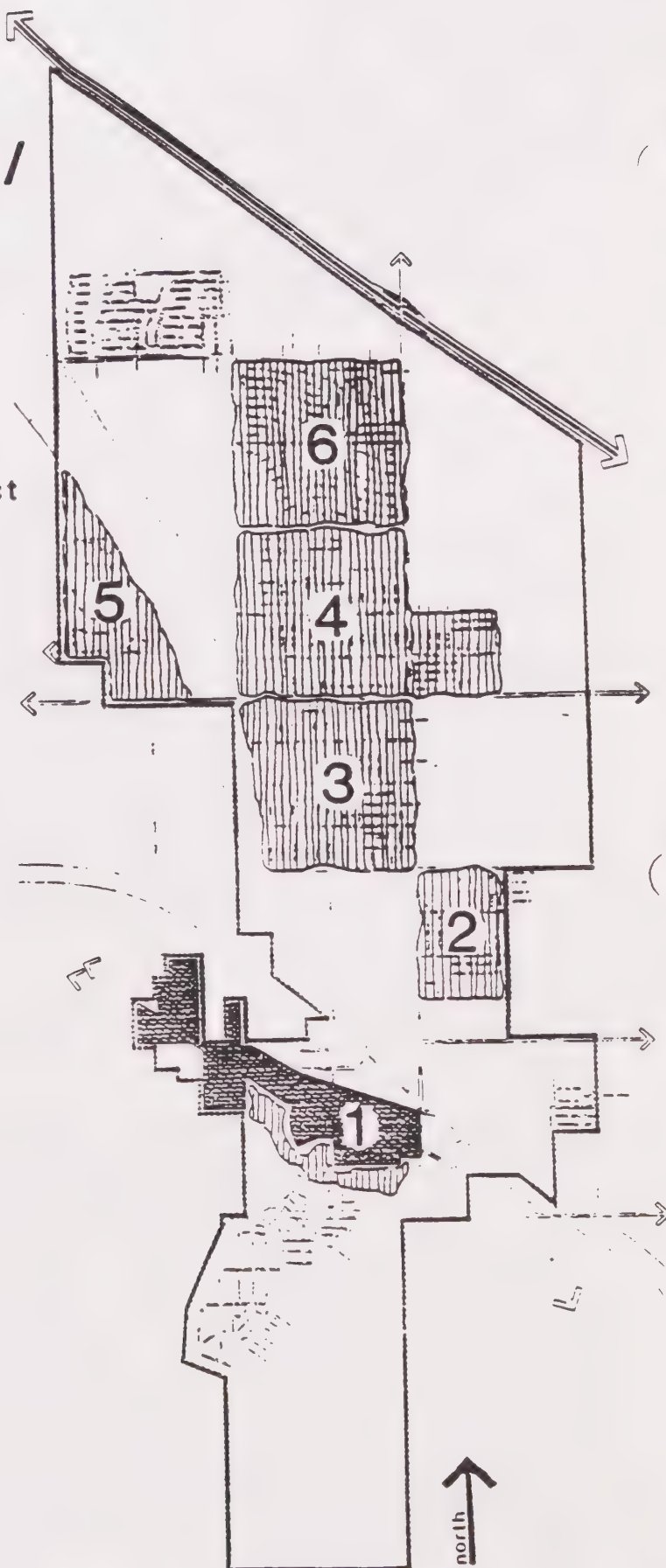
## Legend



Redevelopment project  
area no. one



Potential  
redevelopment/  
rehabilitation areas



# CATHEDRAL CITY GENERAL PLAN



- 1.1.2      Program: Conduct evaluations of potential redevelopment areas identified in the General Plan for consideration as additional project areas.
- 1.1.3      Program: Develop a process for including project area property owners in preparation of redevelopment plans.
- 1.1.4      Program: Conduct a full range of redevelopment activities including, but not limited to, property assembly, property acquisition, public facility or infrastructure improvements, specific land use planning, land use regulation, property disposal, relocation services and necessary financing arrangements.

## C. ECONOMIC DEVELOPMENT

The purpose of this section of the General Plan is to establish the need for economic development planning as a full part of the City's commitment toward achieving its long range planning goals and objectives. A General Plan, by its very definition, is a schematic look toward the future. The General Plan is directed at the physical aspects of the future development of Cathedral City. The General Plan, while forecasting the future, must prepare for this eventuality in terms of the present.

Economic development must be a well defined portion of the implementation procedures of the General Plan in order that the end results will be a betterment of the quality of life supported by a strong, viable economic base. In the absence of such a commitment the General Plan might just be an academic exercise.

Federal and State funding for local programs will change drastically in the future. There is a strong emphasis at all levels for local governments to develop local revenue sources. There are limitations on this approach. In addition to the prohibitions of increasing property taxes, a local populace of limited size is neither able nor, in many instances, willing to increase local fees and taxes. Development fees are useful in the short term because of their "one shot" nature. They are not a dependable source of continuing revenue.

The profile of Cathedral City is unique. Having been in existence as an organized community for more than 40 years, it has been a City without political boundaries. Through this period it has acquired the same problem areas of any 40 year old



city. Older areas are in need of redevelopment; poorly maintained and deficient streets are the rule; and congested, badly planned traffic patterns prevail. On the other hand, there is much room for new growth in Cathedral City because of the large undeveloped areas. This mixture of the old and the new indicates that the General Plan for Cathedral City requires forward planning for new development, together with strenuous efforts to repair the mistakes of the past and the ravages of time. The City must be prepared to make serious commitments for becoming self-sufficient in anticipation of dwindling state resources. It must develop local bases of financing; it must develop a purposeful and directed economic strategy; and finally, it must develop policies and programs which can implement the goal of becoming economically self-sufficient.

## 1. EXISTING CONDITIONS

Cathedral City has, over the years, maintained a strong commercial base with relation to its total population. An analysis carried out on the alternative General Plan scenarios indicated that the percentage of land dedicated to revenue producing activities, such as commercial/retail, hotel and industrial was significant in all of the selected models. The adopted General Plan encompassed a substantial commercial/industrial base and recognizes the importance of nurturing that base so that it can become a strong and diversified support for the community. At the present time, Cathedral City serves a regional market, being strategically located between Palm Springs and Rancho Mirage. Historically, Cathedral City has been receptive to many commercial enterprises which the nearby cities have, for one reason or another, rejected. These types of commercial enterprises generally fall within the category of retail or service businesses that tend to provide support and service for a year-round community. There appears to be a continuing trend in this direction which is motivated by several factors. Cathedral City is geographically centered between major arteries serving the upper and lower valley. It is in a strategic position relative to servicing commercial enterprises. The accessibility of these commercial enterprises is also enhanced by the fact that they may be reached either by Interstate 10, Ramon Road or Highway 111. The emphasis in the current General Plan on increasing the arterial flows in both a north-south and east-west direction to and from the city will enhance this commercial viability.

## 2. NEEDS

Cathedral City is a unique combination of the old and the new. There is much which needs to be remedied; there are deficiencies in the infrastructure and circulation patterns of the City. There are significant vacant subdivided areas with plotted and recorded lots. Portions of



these areas have streets and other parts of the infrastructure of services already in place. There is little uniformity concerning the quality of these streets and services. Some are adequate and others, such as the water system, are in need of substantial upgrading to meet community development goals. Sewers are non-existent in much of the community. All of this highlights the fact that a particularly strong economic base is essential if these very visible deficiencies are to be corrected.

### 3. OPPORTUNITIES/CONSTRAINTS

As the visual blight mentioned before is so apparent, there is also much room for new growth in Cathedral City because of the large undeveloped areas. It is these undeveloped areas, taken in concert with the development of existing commercial areas, that present the greatest challenge for planning, as well as the greatest opportunities for enlightened commercial and industrial development. Large areas of land located at strategic places along committed arterial highways are currently available for specifically planned types of commercial and industrial development. Here lies the basis for an economic strategy necessary to develop a continuous revenue producing base for the City of Cathedral City.

Currently, the City has a wide diversity in its commercial and retail establishments. The General Plan proposed for the ultimate development of Cathedral City concentrates on defining and enlarging this diversity of commercial enterprise. One of the obvious implications of this strategy is that the broader the commercial/industrial base, the more resistant the local economy will be to economic downturns. The diverse commercial base has proved itself to be one of the valuable parts of the existing Cathedral City community. Therefore, it would be prudent to enhance and strengthen this general approach by providing for programs and policies which would implement a diversification and which would provide for concentrations of commercial development which would be attractive to future commerce and industry in Cathedral City.

#### In Summary:

- a. Opportunities for an expanded economic base (commercial/industrial development) need to be identified and pursued.
- b. Business districts need to be enhanced, particularly with respect to ease of access and parking, in order to improve competitiveness in the valley market area.
- c. Inefficiencies in Highway 111 commercial area need correction.



- d. Convenient employment centers must be provided throughout the City to balance residential development without detracting from the vitality of the downtown area.

#### 4. OBJECTIVES, POLICIES AND PROGRAMS

- 1. Objective: There will be productive, well defined commercial, office and industrial areas.

- 1.1 Policy: The City will plan for and protect the purposeful development of revenue producing commercial, office and industrial areas to serve the City and the region.

- 1.1.1 Program: Establish an Economic Development Commission within the City.

- 1.1.2 Program: Develop a formal economic strategy plan to provide for specific methods to implement the long-term economic program of the City.

- 1.1.3 Program: Establish a formal set of economic priorities for future long-range fiscal planning.

- 1.1.4 Program: Identify and become knowledgeable about all sources of governmental/private enterprise financial assistance to commercial ventures such as new forms of lease/purchase financing arrangements; joint financing opportunities through low interest municipal bonds; industrial revenue bonds and other community development programs which are applicable to commercial/industrial development.

- 2. Objective: There will be an active promotion of business and commerce opportunities.

- 2.1 Policy: The City will collaborate with the private sector in the promotion of commerce opportunities through programs of active participation sponsored by the City.

- 2.1.1 Program: Define the ways and means by which the City can participate in the promotion of business and commerce through joint programs with the Chamber



of Commerce and other community groups.

2.1.2 Program: Develop and implement a positive Business Development program to directly assist business enterprises to locate in Cathedral City.

2.1.3 Program: Implement a study of promotional opportunities in the community and region through the Economic Development Commission.

3. Objective: The economic base will consist of maximum revenue producing uses.

3.1 Policy: The City shall seek revenue producing uses not satisfied in adjacent communities.

3.1.1 Program: Complete and maintain an inventory of possible revenue sources not satisfied in adjacent communities through the Economic Development Commission.

3.1.2 Program: Institute procedures to attract such revenue sources as defined through the inventory.

3.1.3 Program: Develop and maintain a set of economic development priorities for City participation.

4. Objective: There will be a balance between business uses and support systems.

4.1 Policy: The City will strive to maintain a balance between industrial/commercial uses, residential development, labor pool market capability and fiscal/infrastructure capabilities of the City.

4.1.1 Program: Develop a system for monitoring and assessing the degree of economic and fiscal balance/imbalance annually.

5. Objective: There will be tangible support for economic development.

5.1 Policy: The City will establish and maintain efficient permit processing procedures for business use.



- 5.2 Policy: Develop arterial highway system priorities to improve the access to commercial/industrial development.
- 5.3 Policy: Coordinate with the Sun Bus to provide adequate service for commercial/industrial areas.
- 5.4 Policy: Coordinate infrastructure and transportation programs with the Economic Development Commission.

#### D. SUPPORT SYSTEM

The primary purpose of the Support System's portion of the Plan is to maintain or facilitate the basic structure, living environments and economic activities of the City. These systems include transportation, public facilities and services, utilities, and energy.

Although these systems are usually installed and maintained separately, there are many interrelationships between them. The transportation system provides linkages between many of the public facilities and many of the public facilities and utilities locational alignments are coterminous with the transportation system street alignments.

The scope of this division of the Plan is to define the existing conditions, needs and opportunities for each of the support systems, and to establish policies, and programs to achieve identified Plan objectives.

##### 1. TRANSPORTATION SYSTEM COMPONENT

###### a. Scope

This section of the Plan defines the nature and function of the various elements of the transportation system. These elements include the hierarchy of surface streets, and non-vehicular modes of transportation and are depicted on Exhibit 7.








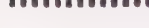
###### b. Existing Conditions

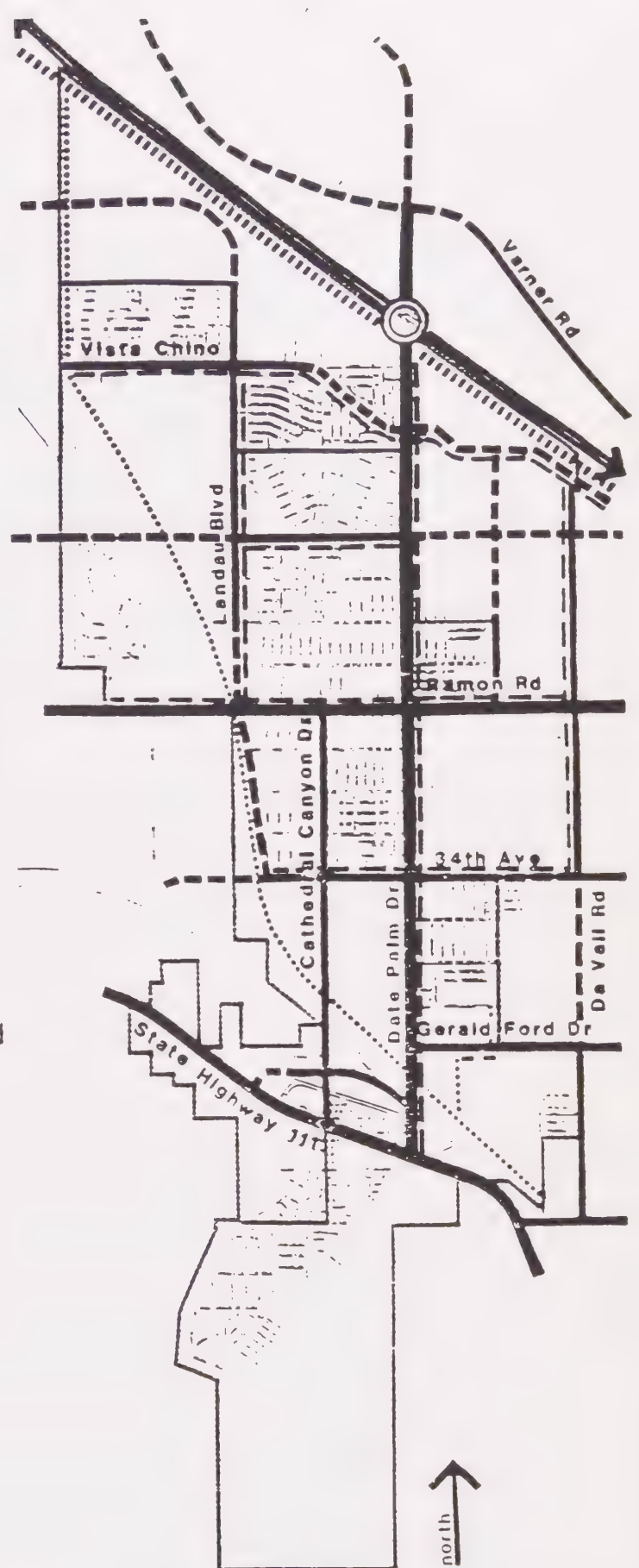
Transportation. Circulation within Cathedral City is comprised of a series of north-south and east-west arterials, generally coinciding with section demarcations and establishing a grid system. According to the Riverside County Master Plan of Streets and Highways, existing roadways have been classified as arterials, highways, major arterials, and secondary arterials. The County master planned roads in the City are identified below. Note that the arterial highway right-of-way of 110' is the County standard, whereas the proposed plan includes a 112' right-of-way standard.



# TRANSPORTATION

## Legend

-  Interstate 10
-  Arterial Highway  
112' Right of way
-  Major Highway  
100' Right of way
-  Secondary Highway  
88' Right of way
-  Proposed Major Highway  
100' Right of way
-  Interchange
-  On-street trails
-  Off-street trails
-  Palm Springs Airport
-  Southern Pacific Railroad



# CATHEDRAL CITY GENERAL PLAN



1) Arterial Highway (110-Foot Right-Of-Way)

State Route 111  
Date Palm Drive  
Ramon Road  
Vista Chino  
Gerald Ford Drive

2) Major Highway (100-Foot Right-Of-Way)

34th Avenue  
De Vall Drive  
Landau Boulevard  
Tamarisk Rd. Drive (proposed)

3) Secondary Arterial (88-Foot Right-Of-Way)

30th Avenue  
Verona Road  
Cathedral Canyon Drive

Many roadways listed above are not improved to the full right-of-way/cross-section. Improvements throughout the City vary from two to four lanes (divided and undivided). Intersection control consists of boulevard stop signs and signalization, primarily along the major routes (e.g., Date Palm Drive, Vista Chino, 34th Avenue, Ramon Road, etc.)

Based on existing improvements, most roads are operating at a level of service C or better; however, minor exceptions do occur on Highway 111 west of Cathedral Canyon Drive, on Cathedral Canyon Drive north of Highway 111, and along Ramon Road at the City's western limits. Average daily traffic volumes are heaviest on Ramon Road (11,000 to 25,000 ADT), Cathedral Canyon Drive (9,000 to 15,000 ADT), Date Palm Drive (7,000 to 18,000 ADT), and Highway 111 (22,000 to 26,000 ADT).

In addition to the surface street system, Cathedral City's transportation system includes mass-transit, non-vehicular trails and the opportunity for air connections through the Palm Springs airport.

Cathedral City has public transit service available along Highway 111, Ramon Road, and Date Palm Drive. Sun Bus provides the public transit service via Routes 19 and 20. The only existing bike path/trail system follows a portion of the Whitewater River drainage channel.



c. Needs

Transportation system needs can be broken down into remedial actions and improvement needs, and needs relating to actual expansion of the transportation system network.

In terms of remedial actions and improvements, incomplete portions of the street system need to be completed and portions in disrepair or inadequately improved need to be brought up to acceptable standard. In addition, areas of existing and potential congestion require corrective/preventative action. A particular problem leading to potential congestion on the major arterials are the excessive access points resulting from small lots of record fronting directly onto Date Palm Drive and Ramon Road. Congestion is also a problem along Highway 111, and the numerous street intersections on sharp angles produce access conflicts and turning movement difficulties.

In terms of expansion of the transportation system, several key road links need to be added to the system to enhance east-west linkages through the City. Vista Chino needs to be extended easterly of Date Palm to connect to De Vall Drive. Landau Boulevard needs to be extended northerly of Verona Road to the west to eventually connect to Palm Drive. Landau also needs to be extended south of Ramon Road to connect to 34th Avenue, thus providing a continuous link from Palm Drive to De Vall Drive. These linkages as well as several others are shown on Exhibit 7.

d. Opportunities/Constraints

The transportation system provides a significant opportunity to tie the key elements of the City's "living environment" together within the community structure framework established by the freeway and major arterial system. The transportation system also provides for movement of people and goods between the various use areas and activity centers of the City. This is accomplished by improving existing arterial routes and providing additional new links.

This system provides opportunities for internal circulation within the City in two basic modes: vehicular and non-vehicular. The vehicular mode is comprised of the surface street system which includes a hierarchy of facilities from Arterial Highways down to local streets. It also includes mass transit routes which provide both inter-city and intra-city connections. The vehicular transportation system is comprised of the following street facilities:



### 1) Arterial Highways:

Arterial Highways serve to move large volumes of traffic from one part of the City to another and provide linkages to the larger regional circulation system serving the surrounding cities. An Arterial Highway is a six-lane, divided roadway with a design capacity of 46,000 to 57,000 vehicles per day. Arterial Highways also form a major element of the Community Structure and are discussed in that context in Section II, A, 3.

### 2) Major Highways:

Major Highways are intended to carry traffic from local residential streets to and from traffic generators such as employment, major retail or public facilities. These facilities may also serve to direct traffic to and from Arterial Highways. A Major Highway is a four-lane, divided or four-lane with painted median roadway with a design capacity of 31,000 to 38,000 vehicles per day.

### 3) Secondary Highway:

Secondary Highways serve in a similar capacity as Major Highways but carry lower volumes of traffic and generally serve residential areas. A Secondary Highway is a four-lane, undivided roadway with a design capacity of 25,000 to 30,000 vehicles per day.

### 4) Collector Street:

Collector Streets serve to carry local traffic to the larger volume traffic facilities described above. Collectors usually provide the primary circulation element within individual neighborhoods and developments, and are intended for both vehicular and pedestrian access. A Collector Street is a two-lane roadway with a design capacity of 15,000 to 18,000 vehicles per day.

### 5) Local Street:

Local Streets are the smallest element in the vehicular transportation network. They provide direct property access and serve as a feeder system to collectors and larger traffic carriers. Where local streets are cul-de-sacs, they should not exceed 600 feet in length.

Cross-sections are shown for each street facility in Exhibit 8. Several special sections are included to serve identified special needs, i.e., flared arterial intersection, and industrial collector. The flared



arterial intersection has been developed to handle high volume intersection conditions where increased turning movements must be accommodated to maintain acceptable levels of service. In many instances, owing to local property configurations or development constraints, it may be necessary or prudent to revise special sections for certain links in the system. This is acceptable as long as the capacity required is provided.

In order to minimize the amount of right-of-way required and still accomplish the purposes of the arterial system, particularly along the dominant routes through the City and where trails occur, a system of public service easements (PSEs) is proposed. This allows some design flexibility and, along with required setbacks and frontage treatments, achieves an efficient and visually pleasing arterial system.

Mass-transit (bus) routes are accommodated on the surface street system and are provided on a regional basis by Sun Bus. Sun Bus is responsible for review and designation of services, and can revise schedules and routes according to expressed need and growth patterns.

The non-vehicular mode of the transportation system is comprised of three basic elements: a trail system, rail facilities, and air facilities through the Palm Springs Airport. These elements provide the City with additional opportunities for circulation, access, and linkages to serve the major land uses of the Plan.

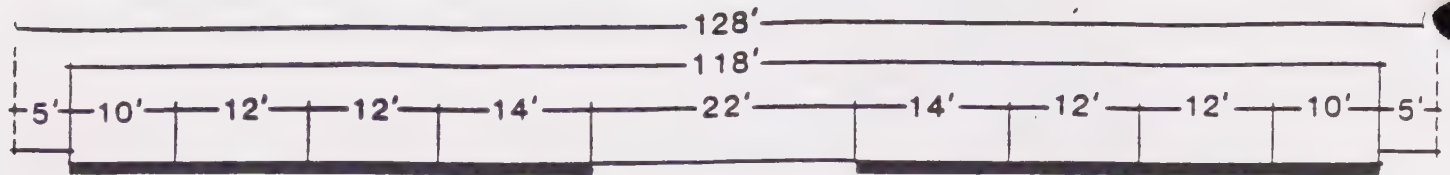
The trail system is comprised of pedestrian, bicycle, cart and equestrian facilities which can be located both within street rights-of-way and within their own easements. Trails provide an opportunity to link key activity areas together, provide access to open space areas not served by the vehicular road system, and serve to reduce the dependence on vehicles and vehicle miles traveled.

Rail access is possible along the Southern Pacific Transportation Company facility which parallels Freeway I-10. Rail access provides an opportunity to service industrial development and to attract those types of industrial and commercial development which require rail proximity.

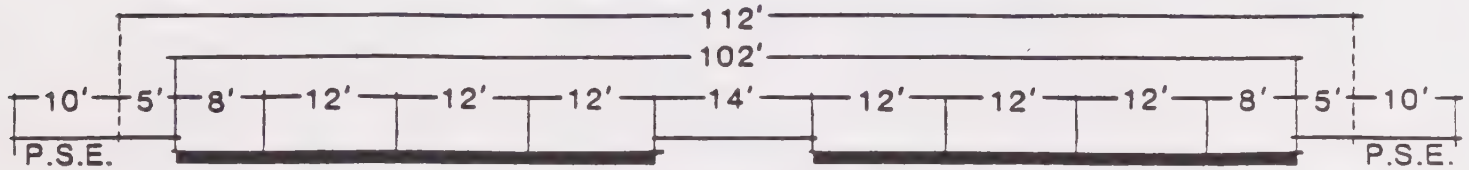


# TRAIL and STREET SECTIONS

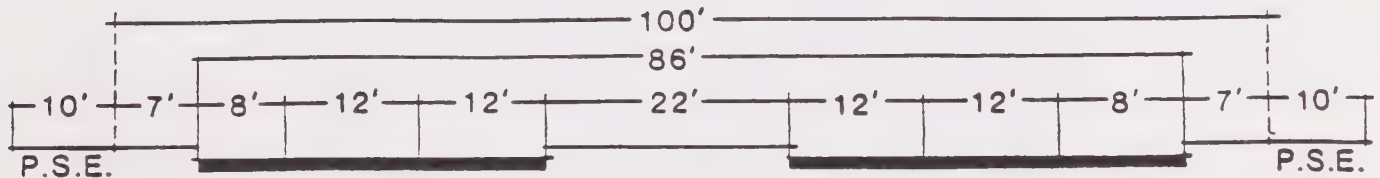
## EXHIBIT 8



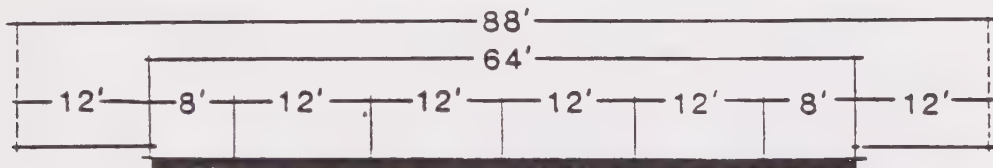
Flaired Arterial Intersection



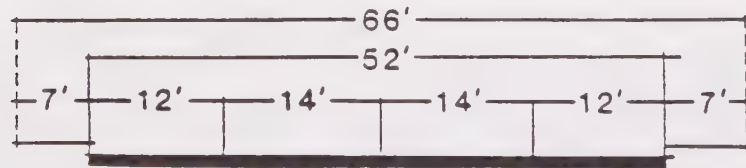
Arterial Highway (6 lanes)



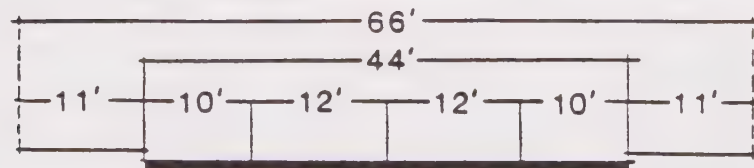
Major Highway (4 lanes)



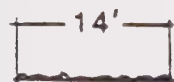
Secondary Highway (4 lanes)



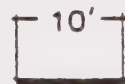
Industrial Collector



Residential Collector



Equestrian Trail



Bikeway

Note: Where on-street trail occurs, P.S.E. is 10'.



Air access is possible through the Palm Springs Airport which is located just westerly of the City along Ramon Road. This access provides an opportunity for the City to make interstate and intrastate connections which may be important in attracting potential commercial/industrial uses to the City. Although the airport is not within the City limits, the street system has been designed to maximize vehicular access towards the airport area.

The transportation systems are shown in Exhibit 7.

e. Objectives, Policies and Programs

Based on the transportation system conditions, needs and opportunities outlined above, the following objectives are established as desired future conditions toward which the Plan is directed. Policies and programs are also identified to achieve transportation system objectives and maximize opportunities.

1. Objective: The transportation system will provide for the safe, convenient, expeditious, and environmentally acceptable movement of people and goods.

1.1 Policy: The City encourages the improvement of the local street system through the use of appropriate traffic control and design techniques which increase the efficiency and safety of traffic movement within the City.

1.1.1 Program: Develop and enforce street improvement and maintenance standards.

1.1.2 Program: Establish a Capital Improvement Program for remedial right-of-way acquisition and maintenance as well as necessary improvements.

1.1.3 Program: Maximize traffic carrying capacity in the Highway 111 corridor through a cooperative effort by the City, property owners and local businessmen to provide parking off street in parking lots adjacent to or behind stores.

1.1.4 Program: Identify and pursue special circulation design



studies where localized conditions require revised street patterns and/or special sections.

1.1.5 Program: Develop a plan and regulatory mechanism to restrict truck traffic to arterial and major street classifications.

1.2 Policy: Direct access to all street facilities above Collector Streets shall be judiciously controlled to minimize traffic conflict points and promote efficient and safe traffic movements within the City.

1.2.1 Program: Develop standard conditions of approval for subdivision maps and major project approvals which restrict access points, and/or require dedication of access rights.

1.2.2 Program: Identify areas of excessive access to focus remedial actions to eliminate points of conflict.

1.3 Policy: The City shall encourage the development of additional north-south linkages between I-10 and Highway 111, and east-west linkages between Palm Springs and Rancho Mirage.

1.3.1 Program: Develop a system for establishing annual priorities for street and highway improvements based on need.

1.3.2 Program: Establish plan lines for the preservation and dedication of identified street rights-of-way on the Transportation System Diagram.

1.4 Policy: The City shall maintain a local circulation system based on a hierarchy of streets which are designed to serve different functions within the transportation system.

1.4.1 Program: Adopt street system standards and street sections to guide street improvements.



- 1.4.2 Program: Adopt a street directional signing program to identify through versus local traffic routes.
- 2. Objective: A balanced transportation system composed of vehicular and non-vehicular facilities and facilities access will be maintained.
  - 2.1 Policy: The City shall encourage the use of mass transportation to reduce vehicle miles traveled, accommodate residents without private transit means, and reduce energy use.
    - 2.1.1 Program: Coordinate with Sun Bus to encourage adequate bus service for all residents of the City.
    - 2.1.2 Program: Provide for transit facilities at appropriate activity centers throughout the City.
    - 2.1.3 Program: Identify and develop special transportation system improvements to serve the needs of elderly, handicapped and disadvantaged citizens.
    - 2.1.4 Program: Establish and maintain a transportation and traffic committee to advise the City Council on transportation issues and priorities.
    - 2.1.5 Program: Establish methods for insuring citizen participation and intergovernmental coordination in transportation matters.
  - 2.2 Policy: The City shall provide a secondary circulation system consisting of pedestrian, bicycle, and equestrian facilities.
    - 2.2.1 Program: Develop right-of-way requirements and improvement standards for bicycle and equestrian trails.
    - 2.2.2 Program: Pursue State and Federal funds for implementation of bikeways.



2.3 Policy: The City shall recognize the special safety needs of the secondary circulation system user.

2.3.1 Program: Establish minimum standards for separation of vehicular traffic and trail facilities.

2.3.2 Program: Establish trail crossing points of vehicular facilities to coincide with signalized or otherwise controlled crossings.

2.3.3 Program: Establish standards for handicapped access improvements.

2.4 Policy: The City shall encourage the development of a balanced transportation system.

2.4.1 Program: Develop a transportation system which provides adequate interface to rail and air facilities.

2.4.2 Program: Prepare and adopt rail served site development standards.

## 2. PUBLIC FACILITIES AND SERVICES COMPONENT

### a. Scope

This section of the Plan describes the facilities and services which constitute the basic "infrastructure" of the City. The term "infrastructure" is a collective term for water delivery, wastewater systems, and drainage facilities. It can also include the public services provided to the community in terms of fire, police, schools, parks, libraries, civic center facilities and solid waste collection.

The discussion of estimated costs are based on very general information from the sources indicated and are valuable only to indicate rough order-of-magnitude cost levels. More specific and current figures will have to be developed as part of the capital improvement and budget process in concert with the appropriate agencies.



b. Existing Conditions

1) Water:

Two agencies have jurisdiction and are responsible for providing domestic water to residents and users in Cathedral City. Their service areas and facilities are depicted on Exhibit 9. These agencies, the Desert Water Agency (DWA) and the Coachella Valley Water District (CVWD), presently maintain water storage and backbone distribution facilities in the City.

The area served by the DWA includes that portion of Cathedral City which is south and west of the Whitewater River and west of what would be the extension of Date Palm Drive south of Highway 111 (to the City limits). Facilities maintained by the DWA include water storage tanks and reservoirs and distribution main facilities; in addition, several wells exist in and adjacent to the City which serve as a water source.

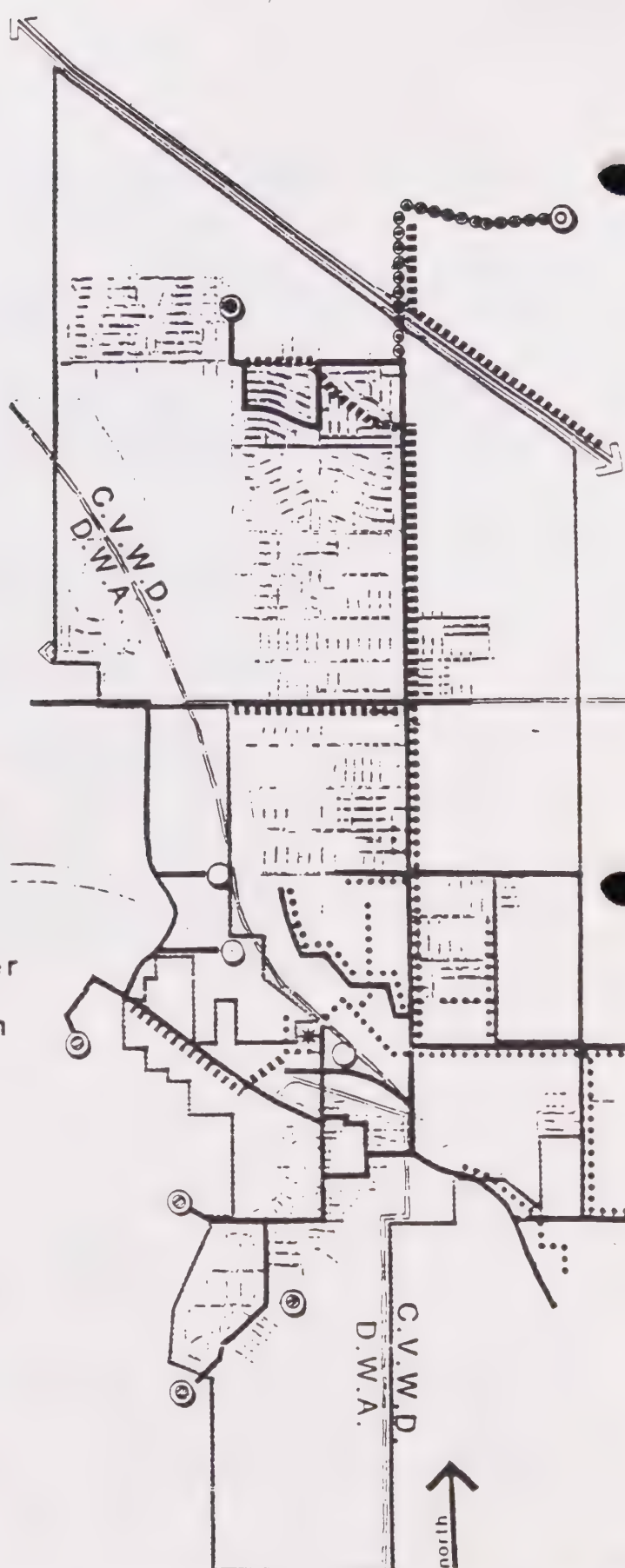
The area northerly of I-10 is within the CVWD service area. However, no water storage or distribution facilities presently exist there. The District does indicate plans to ultimately provide a water storage facility in that area or pump water northerly of the freeway from the existing distribution system.



# SEWER and WATER

## Legend

- ⊙ Reservoir
- Well
- Water line
- \* Pump station
- ..... Sewer line
- c.v.w.d. Boundary line between  
Coachella Valley  
Water District and  
Desert Water Agency
- ..... Proposed Trunk Sewer
- ..... Proposed Water Main
- ⊙ Proposed Reservoir



# CATHEDRAL CITY GENERAL PLAN



## 2) Wastewater

The same two agencies are responsible for providing wastewater conveyance and treatment facilities for Cathedral City. Their respective service areas are the same as outlined for water service and also are shown on Exhibit 9.

The CUWD is responsible for providing wastewater conveyance and treatment for the area north and east of the Whitewater River (and east of the future Date Palm Drive extension south of Highway 111). Facilities maintained by CUWD include sewer trunk lines in the central portion of the City. Sewer mains exist along Date Palm Drive from Gerald Ford Road northerly to Ramon Road, along Gerald Ford Road to Da Vall, and southerly along Da Vall to Frank Sinatra Drive. The majority of the area served by CUWD, including all of the area northerly of Ramon Road, is not sewered and relies on individual septic systems. CUWD maintains a wastewater treatment plant at its Cook Street facility southeasterly of Cathedral City. All wastewater collected within Cathedral City is conveyed to this treatment plant by gravity flows.

The DWA is responsible for providing wastewater conveyance facilities for that portion of Cathedral City which is south and west of the Whitewater River and west of what would be the extension of Date Palm Drive south of Highway 111. Facilities maintained by the DWA are limited and include a sewer trunk northerly of and parallel to Keiley Road which carries wastewater from a development area within the City of Palm Springs, to a pumping station on Cathedral Canyon Drive just south of the Whitewater River. This pump station, in combination with a force main, carries wastewater across the river and into the CUWD trunk main system for conveyance to the Cook Street treatment facility.

In reality, practically none of Cathedral City within the DWA service area is presently sewered, but rather it is served by individual septic systems. A new commercial development on the south side of Highway 111 (the National Lumber Center) has been required to install dry sewer lines for eventual hookup to a trunk main system when that backbone trunk system is installed. The DWA has a policy which requires new developments to provide dry sewer lines for eventual hookup if no trunk main exists adjacent to the development area.



### 3) Drainage:

Storm drainage facilities are the responsibility of the City's Public Works Department. These facilities normally include the storm drain system constructed within street rights-of-way and any additional drainage conveyances from the street storm drain system into the regional flood control facilities such as the Whitewater River. In areas where storm drains do not exist, water is carried within the streets paved section, normally in the gutter along both sides of the street.

Cathedral City has been developed to date with virtually no in-street storm drain piping system. Thus all surface flows are directed onto streets where the storm runoff is carried along the curb and gutter until it outfalls into the regional flood control facilities.

### 4) Fire Protection:

Fire protection and rescue services are provided by the Riverside County Fire Department. There is one fire station within the city limits which houses one Riverside County fire engine, a city squad and city rescue. A second county engine, which is used as battalion relief is also housed in the facility and used when not needed to cover for an engine under repair.

### 5) Police Protection:

Law enforcement in the City of Cathedral City is provided by contract with the Riverside County Sheriff Department. The County maintains a Coachella Valley substation in Indio, approximately 15 miles east of the City, with 71 sworn officers to serve all unincorporated areas and contract cities.

### 6) Schools:

The entire City is located within the jurisdiction of the Palm Springs Unified School District. Presently, the District has 12 schools, including 8 elementary schools (K-6), two middle schools (7-9), and one high school (10-12). Of these facilities, three are located in Cathedral City: Agua Caliente and Cathedral City Elementary Schools and Nellie Coffman Middle School.



Based on the information available, the schools in Cathedral City have a capacity of slightly less than 2600 students and enrollment of 1768. Approximately 30 percent capacity in the three facilities is presently available.

7) Parks:

There are presently two formal park facilities to serve the City. The first is a school/park combination facility at the Cathedral City Elementary School on Second Street. The other is a small neighborhood park in the north central portion of the City on Tachevah Drive.

8) Library:

Library services are provided by the County of Riverside. The County maintains a branch library facility in Cathedral City on A Street just off of Highway 111.

9) Civic Center:

The Cathedral City offices are presently located on Perez Road in a portion of a larger complex of business park type uses. The civic center as it now exists does not include any other community facilities besides the City Hall offices and Council Chambers.

10) Solid Waste Collection:

Solid waste collection is presently performed by private haulers who utilize two area sanitary landfills: the Edom Hill and Coachella Sanitary Landfills.

c. Needs

Public facilities and services needs/deficiencies consist of both remedial actions and system or service expansions. Much of the public facilities needs will result from future growth as a result of this Plan and should be addressed as development occurs. However, planned expansion of major service facilities should be programmed in advance of actual need.

1) Water:

Water service is presently provided to virtually all of the developed or subdivided areas of the City. However, the main water transmission system south of I-10 is generally inadequate and should be upgraded



to accommodate future development. There are no facilities in the designated sphere of influence north of the freeway. As such, both a reservoir and transmission main will be necessary; these facilities are depicted on Exhibit 9 and include a 1 million gallon water storage tank and a main, approximately 2 miles in length, extending from the reservoir to the vicinity of Date Palm and Vista Chino. In addition, the subdivided residential areas north of 34th Avenue which are programmed for higher density land use than originally planned may have fire service water delivery deficiencies based upon established City fire flow standards. This may require remedial actions to increase line sizes or parallel existing lines.

## 2) Sewer:

Wastewater collection facilities presently serve a limited area of the City. The backbone collection system needs to be expanded to serve areas of future land use development or intensification. This is particularly pertinent in the area north of Ramon Road where extensive subdivisions were approved with small lot septic systems. The intensification of development called for by the Plan will probably necessitate the sewerage of much of this area. The area north of I-10 has no collection facilities at present and proposed land uses in that area will require collection system expansion.

Sewer facility deficiencies are extensive, particularly south of I-10. In this area, CVWD improvements will include extension of a trunk main north along Date Palm from Ramon Road to Vista Chino; a trunk facility must also be constructed in Ramon Road from Date Palm west to the Whitewater. North of I-10, a sewer main extending in Date Palm south to the freeway and then easterly along that route must also be constructed. In the DWA, additional facilities will also be needed, including a trunk facility in Highway 111 as depicted on Exhibit 9. All sewer trunk facilities will be 15-inch mains.

Description of these facilities is identified below:

### Coachella Valley Water District Facilities:

- ° Extend trunk main up Date Palm and along Vista Chino; west on Ramon Road to Whitewater.
- ° Extend sewer down Date Palm and along I-10.



## Desert Water Agency Facilities:

- ° Extension along Highway 111.

### 3) Drainage:

Presently no facilities exist other than surface street carrying capacity and regional flood control facilities. New development areas need to incorporate both master planned storm drains as well as in-street storm drains. In addition, remedial improvement to install storm drain facilities should be planned for existing developed areas.

Exhibit 11 depicts the Master Plan of Drainage proposed for Cathedral City. The Plan includes a system of concrete pipes, box culverts, storm drains and other drainage facilities. Most of the master plan improvements occur in the northern portion of the City. Because a portion of the City lies within the limits of the Rancho Mirage watershed, and hence, master plan boundary, the facilities necessary to provide storm protection have been identified in the Plan for Flood Control and Storm Drainage for that City.

### 4) Fire Protection:

Only one fire station exists within the southerly portion of the City. Based on the one and one-half mile service radius criterion established by the County and Insurance Services Offices, two additional fire stations will be required to provide an adequate level of fire protection to residents and businesses in Cathedral City. One of these stations will be necessary south of I-10 while a second will be necessitated as development occurs north of I-10.

Exhibit 10 identifies candidate locations for the proposed fire stations. It is recommended that the facility south of the freeway be located in conjunction with the proposed civic center on Date Palm Drive south of McCallum. This station will provide primary fire protection in the area north of the Whitewater River. Because it is difficult to anticipate the nature and intensity of future development north of I-10, a precise location for the second fire station (which will serve that area) has not been made. Rather, an appropriate location can be identified as development occurs. Important criteria which should be considered include accessibility, intensity of development, and service area (i.e., 1-1/2 mile radius).



Facilities, improvements and equipment necessary to implement each fire station, not including site acquisition include:

Fire station - contains 2 engine companies and rescue squad

Site Improvements - landscape, paving, etc.

Fire Engine

Rescue Squad Equipment

Volunteer Squad Equipment (15 men)

In addition, it will be necessary to acquire a one-acre site north of I-10 because that facility is proposed at the future civic center as discussed previously.

#### 5) Police Protection:

The service standard for police protection has been determined to be one officer per 4000 people residing in the City.<sup>1</sup> The long-range growth projections for the City based on the General Plan indicate an increase of approximately 68,000 year around residents, with Cathedral City reaching a population of 69,328. Based on the present standard of 1 officer per 4000 residents, an additional 17 police officers will be required to serve the community.

#### 6) Schools:

Buildout of the Plan will generate approximately 7300 students, however, this buildout will probably occur over an extended time frame. This will necessitate the addition of school facilities to accommodate this student generation.

#### 7) Parks:

Development of the Plan will increase the resident population of the City from its present population of approximately 11,000 to an ultimate maximum population of approximately 64,000 people. This increase in population will necessitate the provision of additional public park facilities if the intended ratio of park acres to population is going to be maintained.

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<sup>1</sup> Riverside County Sheriff Department.



## 8) Civic Center:

As the City grows through development of the Plan, a larger city administrative office complex may become necessary. The City may also want to consider consolidating other community facilities with the City hall in a civic center complex. Such a complex might include a senior citizens center, library, fire station or other similar facilities.

### d. Opportunities/Constraints

Public facilities and services provide the basic support functions necessary to sustain the City's living environment and business functions. All of these facilities and services provide an on-going, daily support function, and provide the necessary infrastructure system upon which opportunities for development and the attraction of economic growth must be built.

Those public facilities and services which provide this support base, depicted on Exhibits 9, 10 and 11, include:

- wastewater collection and treatment
- water distribution
- drainage facilities
- fire protection
- police protection
- school facilities
- park facilities
- library facilities
- civic center facilities

Wastewater and water distribution facilities are presently provided by two different agencies, and their respective service areas divide the City along the Whitewater River. Distribution and collection facilities are limited primarily to the southerly portion of the City, thus the opportunity for future growth in the northerly portion of the City, particularly the intensification of development along the I-10 corridor will require both water and wastewater facility extensions into that area. In addition, opportunities for intensification of development within much of the existing subdivided residential tracts northerly of Ramon Road will require sewerage to replace individual septic systems which have been designed to accommodate single-family detached homes.



# PUBLIC FACILITIES

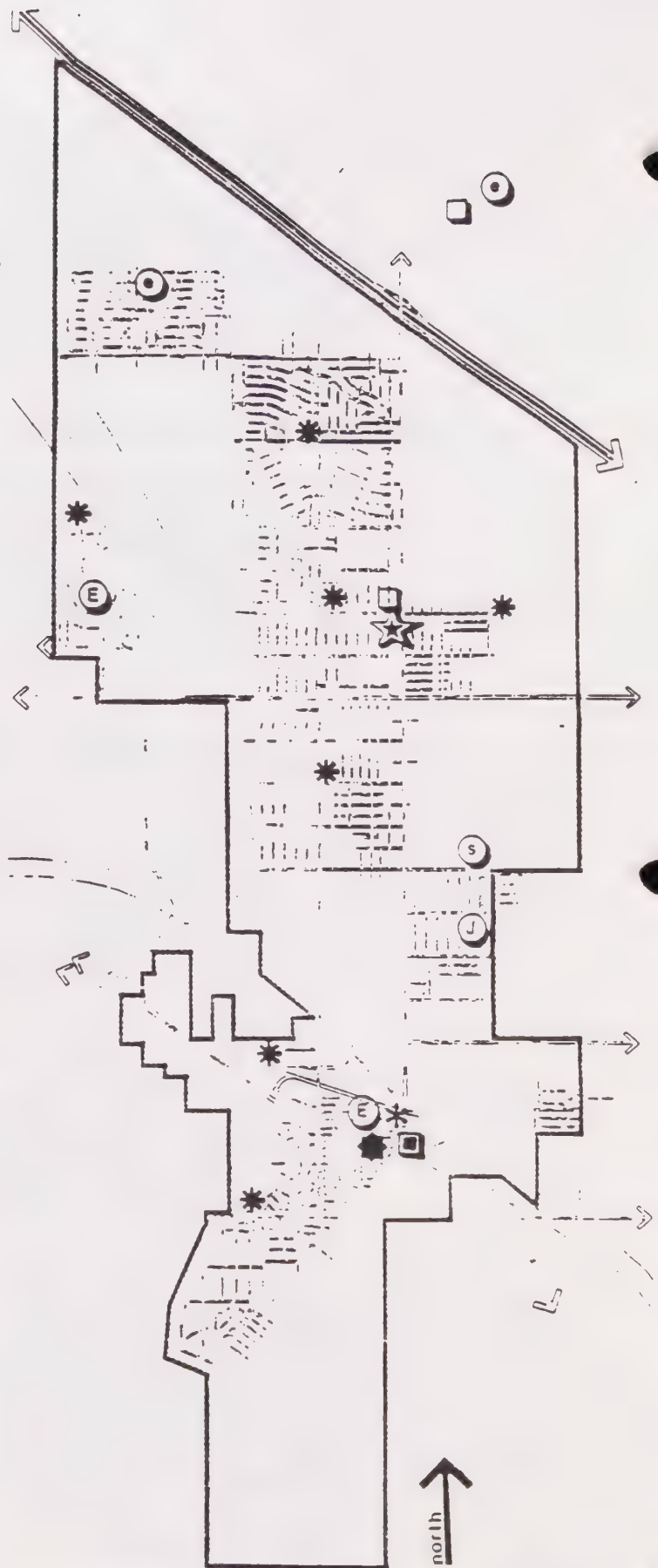
## Legend

### EXISTING FACILITIES

- ▣ Fire Station
- ⬤ Library
- ⓔ Elementary School
- ⓐ Junior High School
- \* Park

### PROPOSED FACILITIES

- ☆ Civic Center
- ▣ Fire Station
- ⓔ Elementary School
- Ⓢ Senior High School
- \* Park



# CATHEDRAL CITY GENERAL PLAN



# MASTER PLAN of DRAINAGE

## Legend

—— Master Plan boundary

CITY of  
CATHEDRAL CITY

P Proposed drainage facility  
(Reinforced concrete  
pipe)

B (Box culvert)

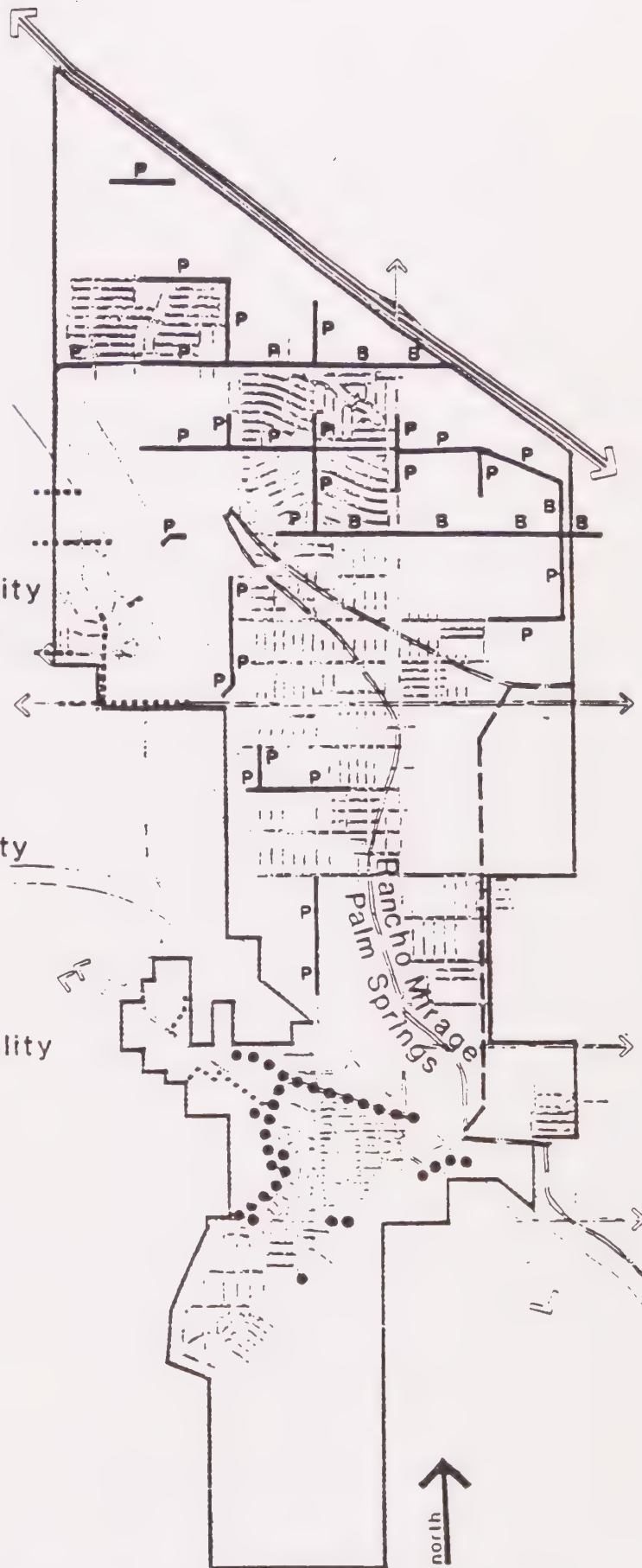
CITY of  
PALM SPRINGS

..... Existing drainage facility

..... Proposed storm drain

CITY of  
RANCHO MIRAGE

----- Proposed drainage facility



# CATHEDRAL CITY GENERAL PLAN



Drainage facility improvements provide the opportunity to enhance property and life safety within the City and may make areas of the City more attractive to potential development interests. The greatest opportunity to realize drainage improvements is through the approval of new development. Remedial improvements in existing development areas will be more costly to achieve.

Fire protection facilities will also require expansion in the northerly portion of the City to ensure adequate emergency response time and fire flows. It is logical that a second fire station be located somewhere between Ramon Road and I-10. In addition, opportunities for intensification of development in some areas may require up-sizing or paralleling of water distribution lines to ensure adequate fire flows. This may require remedial work to accomplish.

Police protection, now provided through agreement with the Riverside County Sheriff's Department will probably need to be expanded as intensification of development occurs within the City. Opportunities to enhance police services may be realized through investigating the establishment of the City's own police services.

School and park facilities provide opportunities to introduce activity centers and open space elements into the community and to establish neighborhood identity. Large scale park facilities also provide the opportunity for community access to major open space and/or natural features within the City.

It is desirable to establish a park development program for the City which will reinforce an overall park/recreation system. In assessing current and future need for park facilities, the City should utilize the standard of 2 acres of park per thousand population, or in lieu thereof, accept payments for park purposes which would be equal in value to the unimproved land for which the payments were substituted.

The establishment of a new civic center complex provides the opportunity to cluster a number of community facilities in one location. This may improve administrative coordination and access to the public as well as achieving efficiencies in physical building space use. Establishing a civic center complex can also be a strong impetus to creating a community identity and focal point. The location of this facility complex can also be an impetus to creating a community identity and focal point. The location



of this facility complex can also be an impetus to other private development and, if located in the central or northern portion of the City, can serve to stimulate new development in that area.

e. Objectives, Policies and Programs

Based on the existing conditions, needs and opportunities outlined above, the following objectives are established as desired future conditions toward which the Plan is directed. policies and programs area also identified to achieve public facility and service objectives.

1. Objective: Safe, convenient, efficient and environmentally acceptable public facilities and services will exist.

- 1.1 Policy: The City will cooperate closely with necessary agencies to achieve the expansion of wastewater and water service facilities to accommodate future growth in an efficient and cost-effective manner.

- 1.1.1 Program: Develop memorandums of understanding between the City and the two agencies serving the City to achieve optimum levels of service and lines of communication.

- 1.1.2 Program: Explore funding alternatives to facilitate remedial improvements in areas of future development intensification.

- 1.2 Policy: The City shall maximize the efficiency and cost-effectiveness of public facilities and improvements.

- 1.2.1 Program: Establish location criteria for parks which encourages joint school/park development.

- 1.2.2 Program: Establish a Capital Improvement Program to schedule joint development of facilities whenever possible.



1.2.3 Program: Investigate the efficiencies of a Civic Center complex and initiate a site selection study.

1.3 Policy: The City shall strive to achieve acceptable service levels for emergency services.

1.3.1 Program: Establish desirable minimum response times for police and fire.

1.3.2 Program: Initiate a site selection study for a north City fire facility.

1.3.3 Program: Work with CUWD to identify methods of increasing fire flows in identified substandard areas.

### 3. UTILITIES COMPONENT

#### a. Scope

This section of the General Plan deals with the utilities concerned with the provision of gas, electricity, telephone and cable television to the City.

#### b. Existing Conditions

The City is currently served through most of its area by the Southern California Gas Company, Southern California Edison Company, General Telephone (GTE) and Coachella Valley Cable Television. The existing infrastructure of utilities is well established and is in existence in almost all of the community areas of the City. There are certain portions which require the extension of gas to individual parcels. However, most of these situations are encompassed by a major grid of high pressure gas lines and represent, in all instances, an in-filling process as opposed to an extension of new service mains. Other areas lack cable television.

#### c. Needs

The City has defined certain areas of need relative to the provision of utilities in the future. One Condition causing considerable visual blight is the criss-cross pattern of telephone poles and electrical wire transmission lines along major arteries of the City. There is also a need for a consistent



system of utility coordination. Planning is currently governed by several diverse agencies and providers but the coordination is spotty, at best.

There is a need for clear, uniform policies and procedures to achieve undergrounding of overhead distribution utilities. This can be coordinated through the Underground Coordinating Committees. Project funding will be in accordance with applicable California Public Utility Commission rules.

There is also a need to insure proper and timely planning of utility distribution systems as well as coordinated construction. Processing requirements for development projects must include verification of coordination with the appropriate utility provider and standards for timely submission.

d. Opportunities/Constraints

There are a number of opportunities concerning the utilities in the City. One of the greatest challenges would be the design criteria necessary to accommodate the program of electrical line undergrounding as outlined by the City Council in its undergrounding ordinances. The opportunities for coordination of projects, as well as the installation of utilities, is a relatively unexplored area in the City. There is a demonstrated need for coordination, not only at the project level, but on a consistent review basis at the utility implementation level. Improved coordination between the City and utility companies is an important ingredient in this General Plan and represents a real opportunity for more efficient community development.

e. Objectives, Policies and Programs

1. Objective: Utility design and planning will be coordinated.

1.1 Policy: The City will work with the utilities providing service in the community to facilitate sound planning and design practices.

1.1.1. Program: Develop project approval procedures in coordination with responsible utility agencies requiring timely submission and appropriate utilities planning/design review and verification.



- 1.1.2. Program: Formulate and maintain a list of priorities for conversion of applicable utility lines from overhead to underground.
- 1.1.3. Program: Cooperate in formulation of a Master Plan for delivery of gas service to the unserved portion of the community.
- 1.1.4. Program: Continue the Utilities Coordinating Committee.
- 1.1.5. Program: Define, in cooperation with utility companies, specifications for unified trenching to allow for multiple installation.

#### 4. ENERGY COMPONENT

##### a. Scope

This section of the General Plan deals with the conservation and supply of energy.

##### b. Existing Conditions

The supply and conservation of energy in the desert area is the subject of critical importance. In order to survive in the desert environment, the efficiency of dwellings to conserve energy is extremely important. Unlike many other areas of the United States, the provision of cooling to the desert is the source of providing a living environment suitable for year-round habitation. The demand for electricity during the extremely hot summer months hits abnormal highs as compared with other utility areas in Southern California. The conservation of energy becomes a significant strategy for achieving a viable living environment with acceptable financial impacts of these utilities costs.

##### c. Needs

The factors related to the conservation of energy are quite specific in the construction of residential and commercial units in the desert. As these specifically directed construction requirements affect both the heating and cooling of the units, there is great justification for standardizing and codifying such conservation requirements through the enforcement of upgraded building standards and codes.



d. Opportunities/Constraints

Opportunities within the City exist in the areas of conservation of energy, as well as the investigation of alternative sources of supply of energy. The location of the City in areas of high solar insulation and potential wind resource provide specific opportunities that should be explored.

The largely undefined geothermal resources which may exist have yet to be verified in terms of their ultimate utility. Other concepts including the newly emerging private and public cogeneration small plant installations have not been extensively explored within the desert area but may offer significant advantages.

e. Objectives, Policies and Programs

1. Objective: Maximum diversity of supply and conservation of energy will be achieved.

1.1 Policy: The City will work with the private sector to actively design, develop and implement programs of energy conservation, residential and commercial and industrial construction.

1.1.1. Program: Explore conservation measures then apply them to building design, to include, but not be limited to:

- Minimal glazing exposure to reduce heat transfer.
- Light colored reflective walls and roofs.
- Extensive insulation in walls and ceilings.
- South oriented roofs for greatest heat gain in winter and ease of reprofit for solar installation.
- Weather strip on all doors and windows.
- Entry airlocks (vestibules) to reduce exterior air infiltration.



- Insulated air conditioning air ducts and hot water pipes.
- Active and passive solar heating.

1.1.2. Policy: Apply the following conservation measures to site design:

- Locate buildings as much as possible to benefit from natural ventilation and cooling; perpendicular to the direction of wind in the summer.
- Reduce extent of paved surface areas.
- Shade paved areas by using trees along streets and parking areas.
- Utilize landscaping to maximize shading of structures in summer months.

1.1.3. Program: Investigate feasibility and design criteria of alternative energy supply sources.

1.1.4. Program: Participate in research on alternative energy sources, including wind, solar, geothermal and cogeneration.

1.1.5. Program: Formulate a position relative to franchise and other joint power agreements involved with the participation in or provision of energy from any of its community resource areas.

1.1.6. Program: Formulate the procedural rules and design standards for alternative energy production ventures within the City.

1.1.7. Program: Create an energy task force to study the potential of various energy production sources within the community and advise the City Council on implementing actions.



**III.**

## **ENVIRONMENTAL MANAGEMENT PLAN**







The purpose of this portion of the General Plan document is to describe and discuss the environmental resources and conditions existing within the City. Issues relating to community safety involving both natural and man-made hazards are also presented. These issues are then related to impacts of future development and programs and policies to preserve, protect or enhance significant resources and maintain community safety are presented and discussed.

#### A. RESOURCE CONSERVATION

##### 1. SCOPE

Conservation, the preservation or wise use of natural resources, is fundamental to the planning process. In the development of this component, an examination of the resource base of Cathedral City has been undertaken to determine those areas of particular concern. An affirmation of community attitudes to these resources has been demonstrated in the needs and objectives statements presented in this section. These needs and objective statements also reflect the results of environmental analysis undertaken to determine the potential impacts of the proposed General Plan.

Four topics of resource management have been designated as areas in which commitments can be made. These areas are: water conservation, visual resources, air quality and biological resources. Visual resource and air quality components are included as integral parts of this plan.

##### 2. EXISTING CONDITIONS

This introductory section will discuss the existing conditions and recent trends in regards to all four resource topics. The needs, opportunities and objectives are also discussed at this level, while the policies and programs are discussed and integrated into the open space, conservation and recreation component in Part II on a general level and on a individual resource basis in subsequent sections of Part III.

- a. Water Conservation. The primary source for water in Cathedral City is groundwater. Groundwater is found in natural underground storage in water bearing materials. The conservation of groundwater is a concern because it is the principal, if not exclusive, source of water for human consumption in the Coachella Valley.

The adequacy of the groundwater supply in Coachella Valley for supporting current and future urbanization is a major, regional issue. No one can say



with certainty how much water is or will be available. The general consensus is that that aquifer is subject to overdraft, and does need to be replenished, as it is currently, by Colorado River water or other Northern California water sources. No guarantee exists that these replenishment sources will be available or adequate in the future. Moreover, the time lag between when waters begin to percolate into the aquifer and when those waters become available for consumption is significant.

Regardless of whether agreement can be reached on the adequacy of water supply, issues arise as to appropriate conservation measures. Urbanization can be limited due to the perceived inadequacy of water supplies, or agricultural uses can be curtailed, or strict conservation measures can be imposed upon urban and agricultural users, or ambitious programs for water recycling can be implemented, or all of the above can be pursued.

- b. Visual Resources. Cathedral City is characterized by four dominant natural physical features. The first, and most significant, is the rugged mountains which thrust up to form the walls of the Coachella Valley and the backdrop for the City. There are very few cities in California which are fortunate enough to have the unique setting of Cathedral City and its neighboring communities.

The second land form feature is the flat, sandy desert floor which characterizes the majority of the land area of the City and the Coachella Valley as well. These essentially flat areas slope gently toward the Whitewater River for drainage.

Thirdly, the natural and manmade drainage courses which flow to the southeast from the local mountains are dominant features which not only contain and direct seasonal storm waters but ensure the preservation of open space in perpetuity. These usually dry water courses form barriers which impeded the construction of roads and highways and other public facilities.

Finally the alluvial fan formed at the base of the mountains, commonly called the cove, provides the most desirable land area for residential development. The cove area of Cathedral City is almost completely developed predominately with single family homes. The higher elevations of the cove provide dramatic overviews of the valley and offer prestigious residential sites.

Manmade features of the City fall far short of those provided by nature. Cathedral City is characterized



by streets lined with unsightly signs and and billboards, overhead utility lines and old and poorly maintained residential and commercial buildings. All too frequently abandoned or broken down cars and trucks can be seen in residential areas. Landscaping throughout the City is generally minimal with the exception of the golf course communities.

- c. Air Quality. The quality of the air and average annual temperature are two of the greatest attractions of the Upper Coachella Valley. The warm dry Valley climate attracts both the seasonal tourist population and permanent retirement population. The primary reason for the dry climate is attributable to the Valley's narrow topography averaging 20 miles wide and 50 miles long. Because the Valley is bordered on the northwest by the San Bernardino and Santa Rosa Mountains, limited moisture laden air passes into the Valley. Further, the funnel effect created by the San Gorgonio Pass between Mount San Jacinto and Mount San Gorgonio occasionally produces turbulent blowsand condition. The Pass also contributes to degraded air quality when polluted air from the Southern Coast Air Basin penetrates the Valley.

Because blowsand is a natural phenomenon causing high particulate levels and because high ozone levels in the Valley are the result of contaminants funneling through the pass, Cathedral City is located in a non-attainment area of the Southeast Desert Air Basin as designated by the California Air Resources Board. Ultimate responsibility to achieve and maintain clean air has been assigned to the South Coast Air Quality Management District (SCAQMD) which, in conjunction with other agencies, prepares local air quality management plans.

Sources of pollutants are generally classified as mobile (motor vehicle) or stationary (land use) but include by-products of the environment. Present levels of air pollutants are primarily attributable to motor vehicle exhaust and seasonal air-borne particulates such as blowsand from the Whitewater River Basin.

The primary pollutant of major concern is ozone, also know as Photochemical Oxidant. While not emitted directly into the atmosphere, it is generated by reactive hydrocarbons and oxides of nitrogen. The other source causing degraded air quality is of air-borne particulate matter. Particulate matter includes both atmospheric particles of dust, soot, aerosols, fumes, mists and blowsand. Blowsand creates a particularly damaging impact that results from high velocity winds lifting soil particles in



areas of disturbed surface condition. The sand is primarily disturbed in the Whitewater River Basin, local storm control washes, exposed dune areas, and active construction sites. The majority of the Upper Central Valley is within the blowsand hazard zone where the highest probability of disturbed sand exists. The abrasive impact of blowsand creates extensive property damage and reduces air quality to hazardous levels. While northern portions of Cathedral City are severely impacted by blowsand, the southerly limits of the City are generally protected along the mountain base.

- d. **Biological Resources.** The largest and primary biotic community in the City is the Sonoran Desert Scrub Community. Sonoran Desert Scrub is abundant and encompasses most of the urban area in the Coachella Valley. Because of the arid nature of the environment, plants must possess the ability to economize water use, the ability to go dormant in periods of drought or both. Characteristic vegetation of the desert include species of cacti which store water, deep rooting plants, and those which have small leaf surfaces (or no leaves at all) to reduce evapotranspiration.

A total of 15 plant species which have been classified as rare and/or endangered by the California Native Plant Society exist in the Coachella Valley. In addition, 7 others have been identified as "sensitive" by the Bureau of Land Management planning staff. Of these species, none appears to be located within the City of Cathedral City.

The Sonoran Desert Scrub Community supports desert mammals, birds, reptiles, and amphibians. Most common species which frequent other Coachella Valley cities also inhabit Cathedral City. Most of the desert mammals are nocturnal, adopting this activity pattern to escape the heat of the day. Burrowing is another habit that has been adopted by the desert species to escape the heat. The desert presents a diverse substrate including sand, gravel, desert pavement and rock.

Several species of wildlife have been identified as rare and/or endangered. These include the Coachella Valley Fringe-toed lizard, Peninsular Big Horn Sheep, and Prairie Falcon among others. Of the endangered wildlife species, only the fringe-toed lizard inhabits the City, primarily in the active blowsand belt in the northern part of the City. The prairie falcon forages in the environs north of the City, and the peninsular big horn sheep may inhabit the higher elevations (above 1000 feet) south of the City.



### 3. NEEDS

Resource conservation needs have been determined by an evaluation of existing conditions and trends, and identification of community needs in earlier phases of the General Plan program. Issues which have been identified by the community and reflect resource conservation needs are:

- a. Significant hillside areas within the City and its potential expansion territory require appropriate means of protection.
- b. Litter, inoperative vehicles and unsightly structures which contribute to blighted appearance and health hazards in many portions of the City need to be removed or upgraded.
- c. There is a feeling that the physical appearance of the community does not properly reflect the predominant values and attitudes of its residents.

Other issues which have been identified through environmental analysis are:

- d. The current source of domestic water is subject to overdraft and the future availability of recharge sources is clouded.
- e. The primary sources of local air pollution are natural sources and the South Coast Air Basin, both of which are beyond local control.
- f. Rare and/or endangered species of wildlife within the City require protection as mandated by State and Federal law.

### 4. OBJECTIVES

Based on the resource conservation conditions and needs discussed above, the following objectives are established as desired future conditions towards which implementation programs are directed:

- a. Significant environmental features and natural resources which contribute to diversity in the City's living environment will be preserved.
- b. Linear open space corridors and significant natural features will be protected where practical.
- c. Energy and water conservation incentives and standards will be established.



- d. Habitats for the Fringed-toed Lizard, Big Horn Sheep, and all other rare or endangered species will be preserved.

These objectives are responded to by policies and programs in the Open Space, Conservation and Recreation Component as well as the Land Use Component of this Plan.

## 5. VISUAL RESOURCES COMPONENT

- a. **Opportunities:** The mountains, which rise abruptly from the desert floor, form a unique setting for the City. The steep rocky outcroppings in the southern portion of the City and the gently rolling hills to the north not only provide a backdrop which establish an edge to the community, they also tend to enclose the City and offer a relief from the continuous urban sprawl which characterizes so many other Southern California communities. Not only do the mountains provide a definition of the City but, they serve to protect the community from the seasonal winds which rake the Valley periodically.

The mountains, if they can be preserved essentially in their natural state, provide the opportunity to keep a natural setting and provide permanent open space which will continue to enhance the character and image of the City.

### b. Objectives, Policies and Programs

1. **Objective:** The visual resources of the City will be preserved and protected.

- 1.1 **Policy:** The City will require the preservation and protection of hillside areas which provide scenic resources to the community.

- 1.1.1 **Program:** Regulate the amount and type of development in hillside areas through the provision of this General Plan and zoning.

- 1.1.2 **Program:** Develop and enforce hillside grading and development standards.

- 1.1.3 **Program:** Remove and control visual obstructions (such as billboards and overhead utility lines)



through ordinances,  
development conditions and  
subdivision regulations.

- 1.1.4 Program: Enhance the  
night-time impact of the  
hills through subtle, care-  
fully focused and  
restrained illumination in  
several locations on the  
south side of Highway III.

## B. COMMUNITY SAFETY AND CONVENIENCE

The purpose of the Community Safety and Convenience section of the Plan is to insure that both the urban and natural environments are managed in such a way that fundamental public safety requirements are satisfied and acceptable standards of convenience in the living environment resulting from the Plan are met.

This section contains the following six components:






- Geological and Seismic Safety - Riverside County Plan adopted by reference;
- Flood Hazard - Systems and means for protecting life and property to acceptable levels from floodwaters;
- Fire Hazard - Riverside County Plan adopted by reference;
- Noise - Documentation of existing and potential noise conditions and means by which unhealthy or undesirable noise conditions can be mitigated;
- Natural Hazard Disaster Preparedness Plan - Riverside County Plan adopted by reference;
- Special Conditions - Unique features of the environmental setting in which Cathedral City is located and which suggest or require special attention to achieve acceptable living conditions.

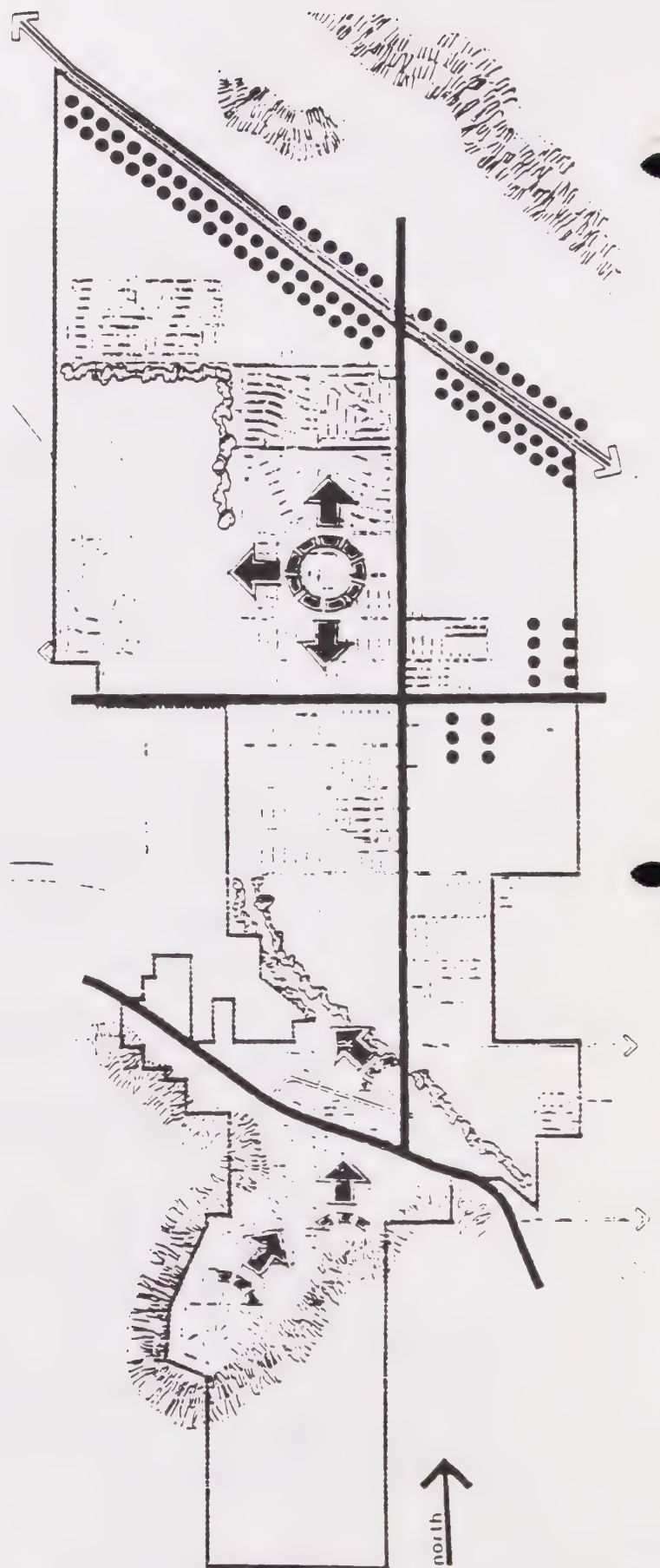
The Community Safety and Convenience section is a form of "Overlay" on the Living Environment and Support Systems sections of the Plan. It provides guidance on how particular concerns about the impacts and workability of those basic parts of the Plan will be resolved in the development process.



# VISUAL RESOURCES

## Legend

-  Arterial corridors
-  Windrows
-  Landscaped edge
-  Panoramic views
-  Mountain backdrop



# CATHEDRAL CITY GENERAL PLAN



It can be thought of as a sort of functional quality control plan, whereas the Community Structure section contains both functional and visual or aesthetic quality control measures. The Living Environments and Support Systems portions of the Plan describe what is to happen physically in the urbanizations of Cathedral City. The Community Structure and Community Safety and Convenience sections combine to define how this urbanization is to result in a quality living environment.

## 1. FLOOD HAZARD COMPONENT

### a. Scope

The purpose of this section is to investigate and evaluate the drainage problems of the Cathedral City area and to develop an economical drainage plan that considers flood protection of both existing development and potential future development.

The Cathedral City area consists primarily of the City of Cathedral City, the westerly portion of the City of Rancho Mirage Master Plan Facilities, and the easterly portion of the City of Palm Springs Master Plan facilities (the flood-zone area north of Gemco and Eagle Canyon south of Highway III). The plan boundary is roughly the toe of the San Jacinto mountains on the south, the Whitewater River on the west, the Interstate on the north and no unique topographic features on the east.

It should be noted by the reader that this section is a master plan, and therefore, should be read and used with this in mind. Simply stated, this plan is an overview; a study of the drainage problems that exist in a specific geographical area, and a conceptual solution to those problems. As stated elsewhere in this report, the selection of the facilities presented in this plan is based on engineering and economic considerations and is by no means the only solution.

### b. Needs



The alignment and location of the facilities proposed in this master drainage plan are general; precise facility locations will be dictated by conditions and other factors existing at the time of

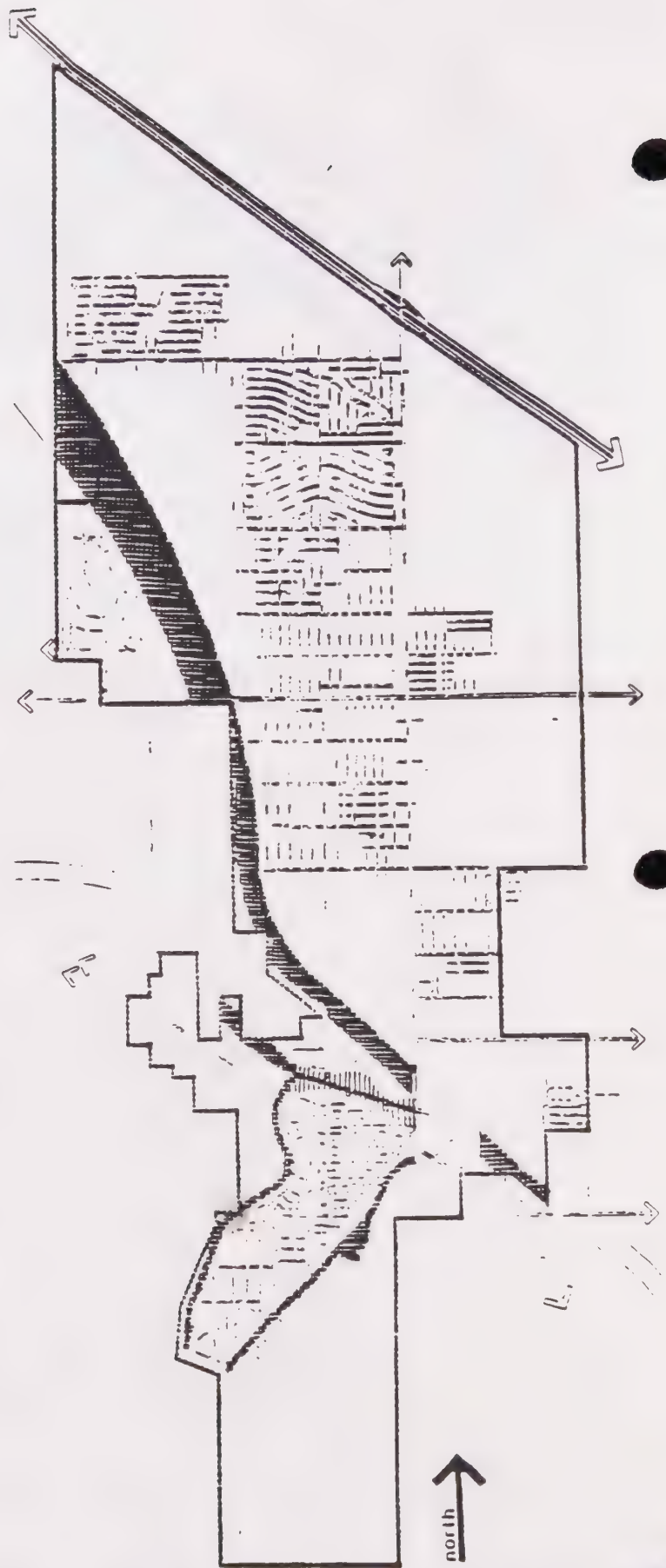
**Note:** The flood hazard component prepared by consulting Civil Engineers to Cathedral City, Duca and McCoy.



# FLOOD HAZARD

## Legend

-  100 year floodplain
-  500 year floodplain



# CATHEDRAL CITY GENERAL PLAN



design. Similarly, the sizing information shown on the plates for this report and on the enclosed map, is preliminary. A more detailed analysis performed at the design stage will determine final sizing.

The alignments of all drains and channels are based on hydraulic efficiency, the ability to drain tributary areas, and economics.

Drainage facilities generally fall into three categories, defined as follows:

#### 1) Regional Facilities

These facilities provide outlets for relatively large drainage areas and are of area-wide or regional importance. The improvement and maintenance of these facilities is generally considered as being the responsibility of the RCFCD, and CVCWD subject to the limited funding capabilities of the District's pay-as-you-go program. However, if development precedes District funding capability, the improvements may have to be developer-financed to provide proper protection.

#### 2) Master Planned Storm Drains

These facilities, frequently identified as Local Drainage Facilities, are extensions of the Regional Facilities and generally drain areas of 500 acres or less, usually 36" in diameter or larger. The improvement and maintenance of these facilities is generally considered the responsibility of the local agency.

#### 3) Street Improvement Projects

This group consists of minor local facilities which are generally less than 36" in diameter and provide very isolated benefit within a local drainage area or solely serve an individual property owner. Local Drainage areas with problem flooding and their specific solutions are beyond the scope of this report. Certain areas such as the residential area south of Ramon Road, north of Avenue 34, and west of Date Palm Drive will need a master grading plan in order to allow for local streets to carry maximum flows.

#### c. Existing Conditions

Presently, there are major flood control facilities located within the study area. These facilities are: Whitewater River Levee, and Cathedral Canyon Channels. Some studies have been conducted on long



term Whitewater levee improvements. The critical nature of this drainageway makes continued attention as specified in the program section critical.

d. Opportunities/Constraints

The drainage area covered by this plan is approximately 15 square miles in size. For the most part, it consists of moderately flat valley terrain sloping generally to the east. Steep mountainous terrain dominates the southerly portion of the drainage area. The extent of the studies establishing this master plan includes:

- Determination of the quantity and points of concentration of storm runoff in the area.
- Preparation of a drainage boundary map.
- Determination of the location, size and capacity of the proposed drainage structures.
- Preparation of preliminary cost estimates.

1) Hydrology

Two methods of hydrology were used in this plan to determine design discharges. For smaller tributary areas, up to approximately 200 to 400 acres in size, the Modified Rational Hydrology Method was used. The Synthetic Unit Hydrograph Method was used for larger areas and in all instances where storm volume was needed. The design discharges used in sizing all future appurtenant facilities in the study area should be determined by one of these two methods.

Methodology and supportive data for the rational and synthetic hydrology can be found in "The Riverside County Flood Control and Water Conservation District Hydrology Manual" date April 1978.

All discharge rates were determined on the basis of ultimate development. Future land use assumptions were based on the proposed general plan.

2) Criteria

All underground storm drains proposed in this plan are intended to collect local urban runoff and, with few exceptions, are located either in existing or proposed street rights of way. Runoff from a 10-year frequency storm is allowed to accumulate in the streets until it reaches the top of the curb. At this point, the plan proposes the initiation of an underground drain which will intercept and convey



the entire 10-year storm runoff to an outlet downstream. (Where curbs do not presently exist, 8 inch curbs were assumed.) Flows exceeding the 10-year frequency storm will generally be carried within street rights of way and the combination of both the street and the underground storm drain provides a high level of protection. In a few instances, circumstances have dictated that an underground drain be sized for the full 100-year flow instead of only the 10-year capacity.

e. Objectives, Policies and Programs

Based on the Flood Control System conditions, needs and opportunities outlined above, the following objectives are established as desired future conditions toward which the Plan is directed. Policies and programs are also identified to achieve flood control system objective and maximize opportunities.

f. Program Implementation

1) Program Administration:

Effecting construction of the recommended facilities within a reasonable period of time, say on the order of eight to ten years, will require personnel having expertise in the administration and inspection of such a program. Staffing by the City to meet such a need on a temporary basis may be inconsistent with and disruptive to the normal functions of the City's full time staff. Consequently, it is recommended that the construction administration be provided by contract with agencies normally engaged in such work or with outside consultants possibly as an added part to the detailed engineering phase of the work. In any event, the City and its governing Council, or some agency thereof, should retain control of ultimate administrative responsibility and of payment authorizations for the program. Future operation and maintenance of the facilities should be controlled by the City itself and may be contracted for with outside agencies depending upon staffing needs and future growth of the City of its normal staffing requirements.

2) Scheduling of Projects:

It is recommended that the City establish priorities for construction of the various elements of the flood control program. The proposed facilities should be constructed as rapidly as possible consistent with good management. The rate of construction of the projects should be based upon: (1) the rate of which the financing scheme adopted by the City can develop the revenues necessary for implementation;



(2) the rate at which detailed plans and related data can be produced; (3) the rate at which plans and specifications can be proceed, bids received, construction contracts awarded, and construction supervised; (4) the availability of rights of way; and (5) the availability of materials, equipment, labor, engineer, contractors and general personnel necessary to accomplish the work. It is estimated that a reasonable total construction period of eight to ten years should be required to complete the recommended program.

### 3) Structures and Alignments:

The alignments included in this report are general in nature and may be refined, modified and detailed as required in the performance of the normal engineering processes of reviewing and augmenting the topographical and hydrological knowledge for the areas for which the projects are planned and in the further process of preparing detailed plans and specifications for their construction. Further, the length, limits, or alignment of a project may be modified, consistent with the best interests of the City, to maximize the relationship of benefits received and availability of funds.

### 4) Multi-use:

Multiple use of public facilities is an important feature in the design and construction of flood control projects in a city having such attractive inherent recreational features as does the City of Cathedral City. The general features of the proposed facilities have been slanted toward this end, and the detailed plans for implementation of the programs should incorporate facilities such as bike paths and equestrian trails as much as practical. The details of construction in all areas should be compatible with other existing and planned public uses of the areas occupied and affected by the projects.

1. Objective: Flood Control facilities will be established to provide for public safety and to mitigate the inadequacy of protection from periodic storms that produce surface runoff within the City area.

1.1 Policy: The City shall require all development projects to provide for flood protection of their proposed development and downstream properties.



- 1.1.1      Program: Establish master plan drainage facilities and drainage fees.
- 1.1.2      Program: Formulate a joint Powers Agreement with the City of Palm Springs and the City of Rancho Mirage for the construction of their facilities within the Cathedral City limits.
- 1.1.3      Program: Initiate a cooperative study with appropriate agencies to determine the need for and approach to long term improvements to the Whitewater River levees.

## 2. NOISE COMPONENT

### a. Scope

The noise component of the plan identifies areas of the City affected by acceptable and unacceptable noise levels. From this basis, the City is able to develop strategies to protect acceptable noise level areas as well as noise sensitive land uses and to mitigate unacceptable noise levels areas.

The noise component is closely related to the community development component as well as the environmental protection component. Noise is an important consideration when locating living environments and community structure.

The noise component identifies land uses which are considered sensitive to noise and suggests compatibility guidelines for land use and noise levels. This information is intended to provide guidance to land use decisions including the general distribution, location and intensity of land uses.

A significant relationship also exists between the noise component and the transportation system. Since transportation systems are a major source of noise, their location, capacity, and design will determine the extent of noise impacts on surrounding land uses. Once commitment is made on transportation systems, land uses should be examined to identify compatibility with noise levels generated by that system.

The noise component also addresses open space considerations since noise can adversely affect the enjoyment of quiet activities in open space. Conversely, open space can be employed to buffer noise-



sensitive land uses through separation and extensive landscaping.

Noise varies over a period of time so that the noise level is not constant. Under conditions of varying time, sound is best expressed in statistical terms. Several rating indices have been developed for the measurement of community noise. The predominate ones now in use in California area: Energy Mean Noise Level ( $L_{eq}$ ); Day-Night Average Sound Level ( $L_{dn}$ ); and Community Noise Equivalent Level (CNEL). These indices apply different weighting factors to noise occurring at various times of the day. Thus when a noise level is given for a particular location, it is important to know what statistical variable is described by that value.

The CNEL index was used in the Noise Component for several reasons. It satisfies the State requirement that the acoustical scale include both magnitude of noise and frequency of occurrence. It incorporates factors of amplitude and spectral distribution of noise, sensitivity of the human ear, duration of noise events, and time of day weighting factors. The CNEL index is also the method of airport noise description accepted by the Southern California Association of Governments and the California Department of Aeronautics for environmental impact reports. A further value of this index is that it produces values within one decibel of  $L_{dn}$  values which is the index recommended by the Environmental Protection Agency.  $L_{dn}$  can be used interchangeably with CNEL if there are not a significant number of events that occur between the evening hours, i.e., 7:00 p.m. to 10:00 p.m., since one decibel is well within the absolute accuracy of the CNEL prediction.

Noise contour portray noise exposure distances from a specified source. Because noise is more variable than constant, noise contour lines should be not thought of as absolute lines of demarcation. More appropriately, noise contours should be regarded as bands of noise exposure with an accuracy of  $\pm$  dB.

The noise contours developed for the City were generated to portray "worst case" noise conditions in which the effect of atmospheric noise reduction and the shielding of roadside building, walls, and landform were not accounted for. The purpose of "worst case" noise contours is to trigger potential noise/land use incompatibilities with built-in flexibility for solutions based upon more detailed noise analyses.



b. Existing Conditions

The primary sources of noise in Cathedral City are transportation facilities. Roads and highways are the most common sources and include regional corridors which serve through traffic (i.e., Interstate 10 and Highway 111). Local arterials, including Date Palm Drive and Ramon Road, which carry large traffic volumes, also contribute to the ambient noise environment in the City. The Palm Springs Municipal Airport, located near the northwestern City Commission is reviewing a master plan study which will identify future noise impact areas. Finally, the Southern Pacific Railroad line traverses the City at its northerly limits and represents a localized and less frequent source of noise.

A community noise survey was undertaken the week of November 7-13, 1982 to determine the existing noise environment in Cathedral City. measurements were taken at 12 locations throughout the City as depicted in Exhibit 14.

The existing noise environment is portrayed on Exhibit 15, Existing Noise Contours. As shown, the noisiest areas of the City are adjacent to roads and highways, the airport, and the freeway and railroad.

c. Needs

The existing noise contours and the community noise survey enable the City to determine the extent of community noise problems utilizing a community noise exposure inventory. A community noise exposure inventory identifies the number of persons exposed to specific high noise levels, and the source of high noise levels.

Table 13 portrays the number of potentially affected residents within the 57 dB and 65 dB CNEL contours for each type of noise source based on the most recent census tract data for the City.

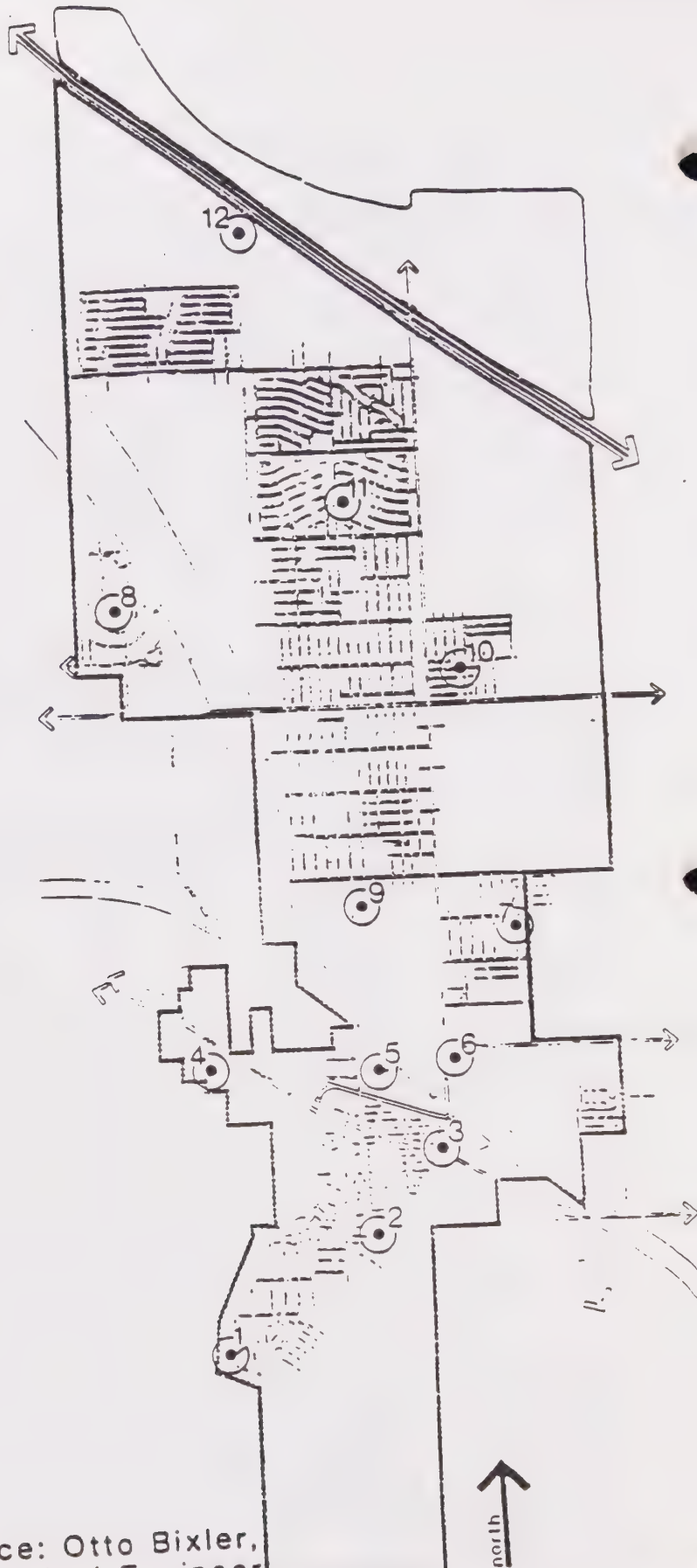
The potential future noise impacts to the City are based on the implementation of the General Plan update. This future noise impact is portrayed in Table 15 as opposed to a future noise contour map because it allows for more specificity in review of potential land use/noise incompatibilities.



# NOISE MEASUREMENT SITE LOCATIONS

## Legend

⑥ Noise measurement  
site location



Source: Otto Bixler,  
Acoustical Engineer

# CATHEDRAL CITY GENERAL PLAN

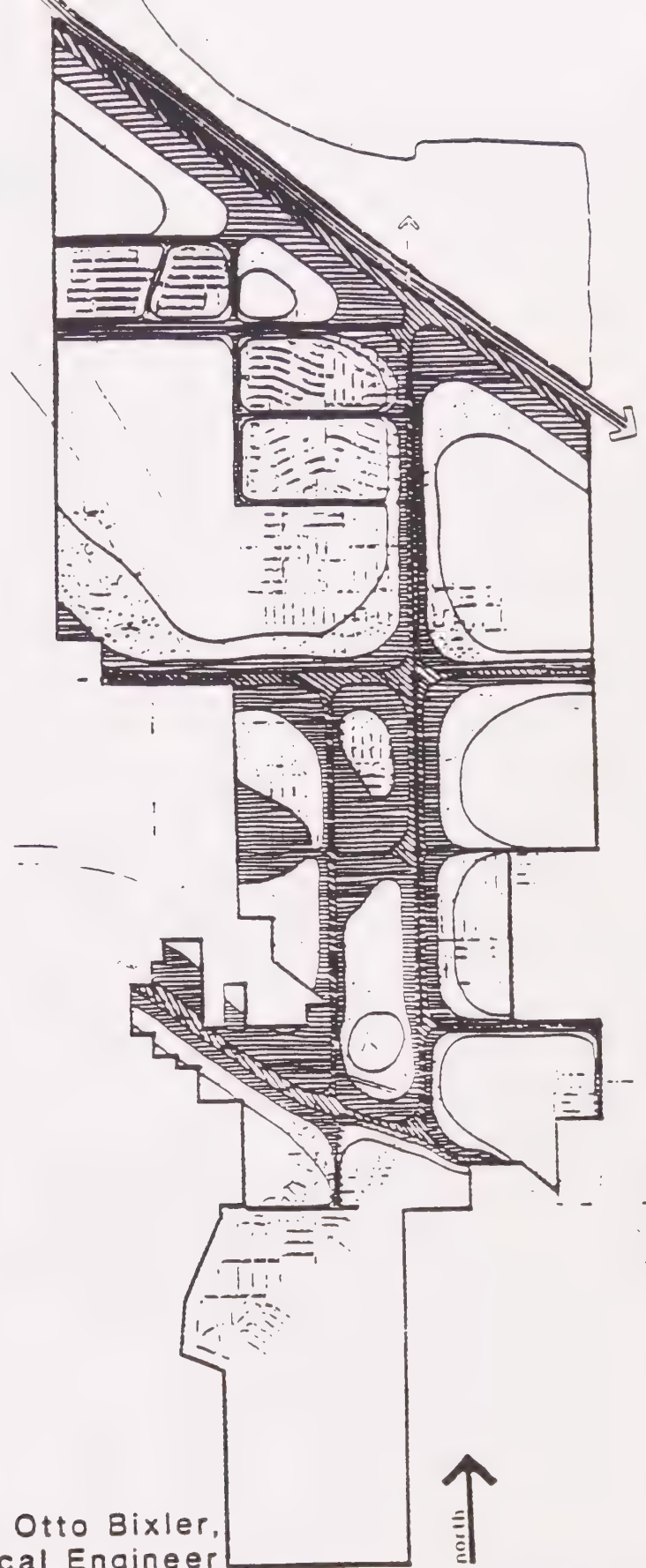
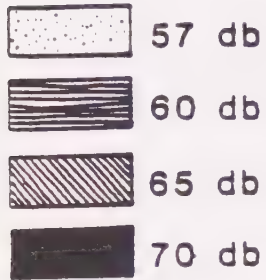
III-18

EXHIBIT 14



# EXISTING NOISE CONTOURS

## Legend



Source: Otto Bixler,  
Acoustical Engineer

# CATHEDRAL CITY GENERAL PLAN



TABLE 16  
EXISTING COMMUNITY NOISE EXPOSURE INVENTORY

<u>Source</u>	Number of persons Impacted by CNEL Exposure*	
	<u>57 - 65 dB</u>	<u>&gt; 65 dB</u>
Airport	610	0
Roadways	3238	209
I-10/Railroad	<u>0</u>	<u>0</u>
	3848	209

SOURCE: The Planning Center

- \* It must be emphasized that the actual number of affected residents is much lower than expressed here since the conservative methodology used to construct the noise contours was used to assure triggering noise assessment studies and mitigation design for new or redevelopment processes in the City.



TABLE 17  
COMPARISON BETWEEN EXISTING AND FUTURE NOISE CONTOURS<sup>1</sup>

	Distance to CNEL Contour (feet)			
<u>Roadway Link</u>	<u>70dB</u>	<u>65dB</u>	<u>60dB</u>	<u>57dB</u>
<u>Verona Road</u>				
1) West of Avenida Quintana	7	32	104	209
<u>Vista Chino</u>				
1) West of Avenida Quintana	64	211	633	1337
2) West of Landau Blvd.	64	211	633	1337
3) East of Landau Blvd.	64	211	633	1337
<u>Tachevah Drive</u>				
1) East of Landau Blvd.	17	62	201	403
<u>30th Avenue</u>				
1) East of Landau Blvd.	19	72	235	472
<u>Ramon Road</u>				
1) West of Landau Blvd.	56	179	568	1132
2) East of Landau Blvd.	61	193	610	1217
3) West of Date Palm Drive	77	239	755	1505
4) East of Date Palm Drive	69	210	660	1317
5) East of DeVall Drive	69	210	660	1317
<u>24th Avenue</u>				
1) West of Cathedral Canyon	29	100	323	647
2) East of Cathedral Canyon	29	100	323	647
3) East of Date Palm Drive	29	100	323	647
<u>Gerald Ford Drive</u>				
1) East of Date Palm Drive	18	67	216	434
2) East of DeVall Drive	23	82	260	519
<u>Highway III</u>				
1) West of Perez Road	54	173	546	1090
1A) East of Perez Road	31	96	301	601
2) East of Cathedral Canyon	12	50	165	329
3) East of Date Palm Drive	15	62	206	411
<u>Landau Blvd.</u>				
1) North of Vista Chino	40	135	431	860
2) North of Tachevah	40	135	431	860
3) North of 30th Avenue	40	135	431	860



TABLE 17  
Comparison Between Existing and  
Future Noise Contours (Con't) <sup>1</sup>

<u>Roadway Link</u>	<u>Distance to CNEL Contour (feet)</u>			
	<u>70dB</u>	<u>65dB</u>	<u>60dB</u>	<u>57dB</u>
<u>Cathedral Canyon Drive</u>				
1) South of Ramon Road	55	202	554	1106
2) South of 34th Avenue	47	175	468	933
3) South of Perez Road	31	97	305	609
4) South of Highway III	7	31	101	203
5) North of Terrace Road	9	39	131	263
<u>Date Palm Drive</u>				
1) North of Vista Chino	178	569	1802	3595
2) North of Tachevah	156	486	1534	3060
3) North of 30th Avenue	156	486	1534	3060
4) North of Ramon Road	152	470	1485	2963
5) North of 34th Avenue	49	146	457	913
6) North of Gerald Ford	49	146	457	913
7) North of Highway III	22	84	275	548
<u>DaVall Drive</u>				
1) North of Frank Sinatra	18	64	206	411
<u>I-10</u>				
1) West of Date Palm Drive	252	565	1231	1954
2) East of Date Palm Drive	237	535	1164	1848

<sup>1</sup> Distances reflected above are from locations of existing noise contours (refer to Exhibit 15).

As can be seen in Table 14, the most significant increases in noise will occur along the most heavily traveled arterials, including Interstate 10, Highway III, Date Palm Drive, Cathedral Canyon Drive, Ramon Road, and Vista Chino.

For Comparison purposes, a future community noise exposure inventory reveals the following persons impacted.

TABLE 18  
FUTURE COMMUNITY NOISE EXPOSURE INVENTORY

Number of Persons Impacted by  
CNEL Exposure

<u>57 - 65 dB</u>	<u>&gt; 65 dB</u>
28,186	15,711



d. Opportunities/Constraints

Cathedral City is faced with redirecting its land uses and infrastructure components to achieve a more cohesive community. Planning to protect citizens and noise-sensitive land uses is an important concern in creating a desirable community environment. However, Cathedral City can achieve an acceptable noise environment by adopting noise/land use compatibility guidelines. The City benefits from its developing nature by being able to plan for noisy areas in the City. Some of the noise sources such as the Palm Springs Airport are beyond the City's control.

The City should be concerned about noise levels from two perspectives; the outdoor and indoor environments. Table 10 presents a Basic Noise/Land use Planning Standard for both interior and exterior environments.

TABLE 19  
BASIC NOISE/LAND USE PLANNING STANDARD

<u>Land Use</u>	<u>Interior Noise Level</u>	<u>Exterior Noise Level</u>
Community Wide Maximum Permitted Noise Level	N/A	76 CNEL (70 Leq)
Residential	45 CNEL	65 CNEL
Schools	45 CNEL	65 CNEL
Hospitals	45 CNEL	65 CNEL
Commercial	55 CNEL	70 CNEL
Industrial	55 CNEL	75 CNEL

The community-wide maximum permitted noise level of 76 CNEL (70 leq) is the level requisite to prevent hearing loss in nearly 100 percent of the population as established as a guideline by the U.S. Environmental Protection Agency.

For noise-sensitive land uses such as residential areas, schools, and hospitals, a 65 CNEL is the level set by the State Aeronautics Act to protect residential areas from unacceptable noise exposure from airports.



An interior noise level of 45 CNEL is normally acceptable and can typically be achieved by a 20 dB reduction through standard construction practices.

Specifically regarding airport-related noise, the Airport Land Use Commission adopted a comprehensive land use plan for the areas influenced by operation conducted at the Palm Springs Airport. The following provisions of that plan shall apply to the area in the northwestern sector of Cathedral City (refer to Airport Land Use Plan prepared for Palm Springs Municipal Airport):

- All new residential construction within the airport-influenced area must be sound-proofed so that noise within the interior living spaces of a dwelling will not exceed  $45 \text{ CNEL}$  (Community Noise Equivalent Level) or  $L_{\text{dn}}$  (day night level).
- The owner of all new residential units within the influenced area should provide as a condition of approval an avigation easement for noise and a non-suit covenant to the City of Palm Springs. (This is recommended as a requirement in the Specific Plan review process.)

Noise sources in Cathedral City are already addressed by enforcement of the California Vehicle Codes, State Noise Insulation Standards, the Uniform Building Code and the State Aeronautics Act. From a planning perspective, noise control in the City will be the most productive from a design perspective. Therefore, each proposed future residential, mixed, educational or medical land use proposal should be accompanied by an acoustical evaluation of the project design at the specific plan or tentative tract level. The acoustical analysis will determine whether the project can meet both the interior and exterior noise/land use standards.

#### e. Objective, Policies and Programs

Based on the current noise conditions, needs and opportunities, the following objectives are established to provide an acceptable future noise environment. Policies and programs are specified to achieve the objectives.

1. Objective: Utilize the planning process to prevent future land use/noise incompatibilities.

- 1.1 Policy: The City will use its powers to assure compatibility of proposed land uses with projected noise levels.



- 1.1.1 Program: Establish a noise referral zone based on the Basic Noise/Land Use Planning Standard and existing and future contour projections to identify potential noise/land use compatibilities. If a project falls within a noise referral zone, an acoustical analysis tailored to the level of specificity of the planning proposal shall be performed. This acoustical analysis will determine whether the project can meet both interior and exterior noise/land use standards and provide recommended acoustical mitigation measures.
- 1.1.2 Program: Encourage the use of buffers between residential and noise-sensitive land uses and other incompatible land uses.
- 1.1.3 Program: City policies and actions, with regard to noise, will be consistent with the Airport Land Use Commission (ALUC) policies for land uses within ALUC jurisdiction.
- 1.1.4 Program: Monitor the planning activities associated with the Palm Springs Municipal Airport Master Plan to ensure City input.

### 3. SEISMIC SAFETY COMPONENT

#### INTRODUCTION

The natural conditions that make California a desirable place in which to live are also often the vehicles for disaster. The active seismic character of the State was most recently evidenced by the 1971 San Fernando earthquake, only a moderate event in terms of magnitude.

Prompted by that event and with increasing evidence that a major earthquake is inevitable, the State has begun a program intended to minimize the loss of life, injury, and property damage that may result. Hazards posed by other natural events such as wildland fires and flooding are also of significant concern, and together, are addressed in this element.

#### MANDATE AND PURPOSE

The California State Legislature, through requirements of the Seismic Safety and Safety Elements, has placed specific responsibilities on local government for identification and evaluation of natural hazards and formulation of programs and regulations to reduce risk. Specific authority is derived from Government Code Sections 65302(f) and 65302.1 which require Seismic Safety and Public Safety Elements of all city and county general plans, as follows:



A Seismic Safety Element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically induced waves such as tsunamis and seiches.

The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure, and seismically induced waves. (Section 65320f).

A Safety Element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and ecologic hazard mapping in areas of known geologic hazards. (Section 65302.1)

The preparation and adoption of the Seismic Safety/Safety Elements will serve the public interest by incorporating information relating to the locations, magnitude, and frequency of natural hazards into the planning and decision-making process. In assessing the desirability of a potential site for a home, business, or factory, the citizen and elected official will have available important information which, if used appropriately, will reduce potential loss of life, injury, and property damage. The purpose of these elements then, is to:

- Recognize natural hazards as important constraints in land use planning by incorporating them into the planning process.
- Assist in the allocation of public resources in Riverside County to develop information regarding flooding, fire, geologic, and seismic hazards, and thereby develop a systematic approach to protect public health, safety, and welfare from such hazards. This information, used in conjunction with previously established goals, objectives and policies contained within this general plan, will play a major role in determining the judicious allocation of future land uses.
- Establish implementation measures that will reduce the adverse impact of those hazards when accomplished. Specifically, these elements evaluate both primary and secondary seismic hazards, flooding, fire, and natural disaster preparedness.
- To serve as an official guide to the Board of Supervisors, Planning Commission, and other governmental



bodies; private organizations; and citizens concerned with natural hazards in the County of Riverside. The intent is to establish uniformity of policy and direction within Riverside County to minimize the risk from natural hazards. Direction is provided by goals, objectives, policies, implementation measures, and detailed mapping as the basis for decision-making in public and private planning matters.

### PROGRAM DEVELOPMENT

In 1973, the Planning Department conducted a preliminary data search regarding seismic and geologic information. While information of varying reliability was available, it was apparent that, if the program was to be productive, professional geotechnical input would be essential for the seismic and geologic hazard investigation. During ensuing months, Riverside County and twelve cities agreed to a cooperative program that would result in a more comprehensive element, examining natural hazards from a regional as well as a local perspective, at a substantially reduced cost. In November, 1974 the County of Riverside, on behalf of all participants, entered into an agreement with ENVICOM Corporation for seismic and geologic input as well as a compilation of existing flood hazard information. It should be noted that the sciences of seismology and fire ecology are relatively young and that much remains to be learned. The basic philosophy under which this element was prepared is that we should incorporate natural hazards analysis into the planning process based on what we know today, rather than waiting until we know all that we would like to know.

The Seismic Safety/Safety Element Program consists of the Technical Report, a comprehensive assessment of seismic, geologic, flood, and fire hazards, accompanying maps, and this document, the Seismic Safety/Safety Element Policy Report. The Technical Report is accepted by the Board of Supervisors, but is not adopted as part of the Element. The design criteria and seismic response criteria presented in the Technical Report are one of several possible interpretations. The Technical Report is, however, the basic research document upon which the Policy Report is based. It will be necessary to update the Technical Report as new or more accurate information becomes available.

### Planning Area

The Technical Report examines natural hazards within Riverside County on two levels. First, the regional aspects of seismic, geologic, and flood hazards are examined and mapped at a scale of 1" = 2 miles. The second phase examines the areas extent of natural hazards on a more detailed basis and is mapped at a scale of 1" = 2000 feet. The latter areas initially included participating cities and adjacent lands, or unincorporated areas which exhibit urban development or are experiencing



pressure to develop. It is anticipated that additional detailed mapping will be incorporated in the future. Existing detailed study areas include:

- Murrieta Valley
- Sunnymead
- Corona-Norco
- City of Riverside
- Beaumont
- Perris
- Hemet-San Jacinto
- Desert Hot Springs
- Cove Communities
- Indio-Coachella
- Blythe

### PRINCIPAL CONSIDERATIONS

This policy report is directed primarily at three basic groups of natural hazards, including seismic and geologic, flooding, and fire. Additionally, one section is devoted to a program to assure adequate preparedness and response in the event of a natural disaster.

#### Seismic and Geologic Hazards

The 1973 Urban Geology Master Plan for California, prepared by the California Division of Mines and Geology, estimated that dollar losses, attributable to geologic hazards (here including flooding) in California between 1970 and 2000, will amount to more than \$55 billion dollars unless loss-reduction measures are initiated. Riverside County, traversed by three major active or potentially active fault zones, has experienced earthquakes of moderate magnitude. To date, however, the relatively low population density has allowed the County to avoid the disastrous consequences of even a moderate earthquake, such as the 1948 Desert Hot Springs event, in a populated area.

Seismic hazards can be grouped into a cause-and-effect classification; that is the basis for their order of consideration in this element. Earthquakes originate as shock waves generated by movement along an active fault. The primary seismic hazards which result are ground shaking and the potential for ground rupture along the surface trace of the fault. Secondary seismic hazards result from the interaction of ground shaking with existing soil and bedrock conditions, and include liquefaction, settlement, landslides, tsunamis or "tidal waves", and seiches (oscillating waves in lakes and reservoirs).

#### Flood and Dam Inundation Hazards

Despite California's, and particularly Southern California's moderate climate, flooding has periodically caused major damage and loss of life since 1900. In 1969, within Riverside



County alone, damages attributable to flooding amounted to over \$40 million dollars. Despite tremendous investment, nationwide, in flood control facilities in the past, losses attributable to flooding have continued to increase.

Flooding hazards are considered in two categories: natural flooding and dam inundation. Natural flooding hazards are those associated with major atmospheric events that result in the inundation of developed areas due to overflows of nearby stream courses, or inadequacies in flood control facilities. Dam inundation hazards are those associated with the downstream inundation that would occur given a major structural failure in a nearby water impoundment.

### Fire Hazards

The Urban Geology Master Plan for California also estimates that losses attributable to fires within California between 1970 and the year 2000 will amount to approximately \$50 billion dollars. Fires in undeveloped areas resulting from the ignition of accumulated brush and woody material are termed "wildland fires". "Structural fires" refers to those that originate from within a structure itself.

Within Riverside County, losses attributable to fire in Local Responsibility areas during the period 1966 to 1974 totaled over \$20 million dollars. The spread of second homes and rural communities into areas of high or extreme fire hazard has accentuated the need to recognize the risk and to take appropriate actions.

Both wildland and structural fire hazards are considered in this element, although emphasis is placed upon the former because of the relatively larger area concerned.

### Disaster Preparedness

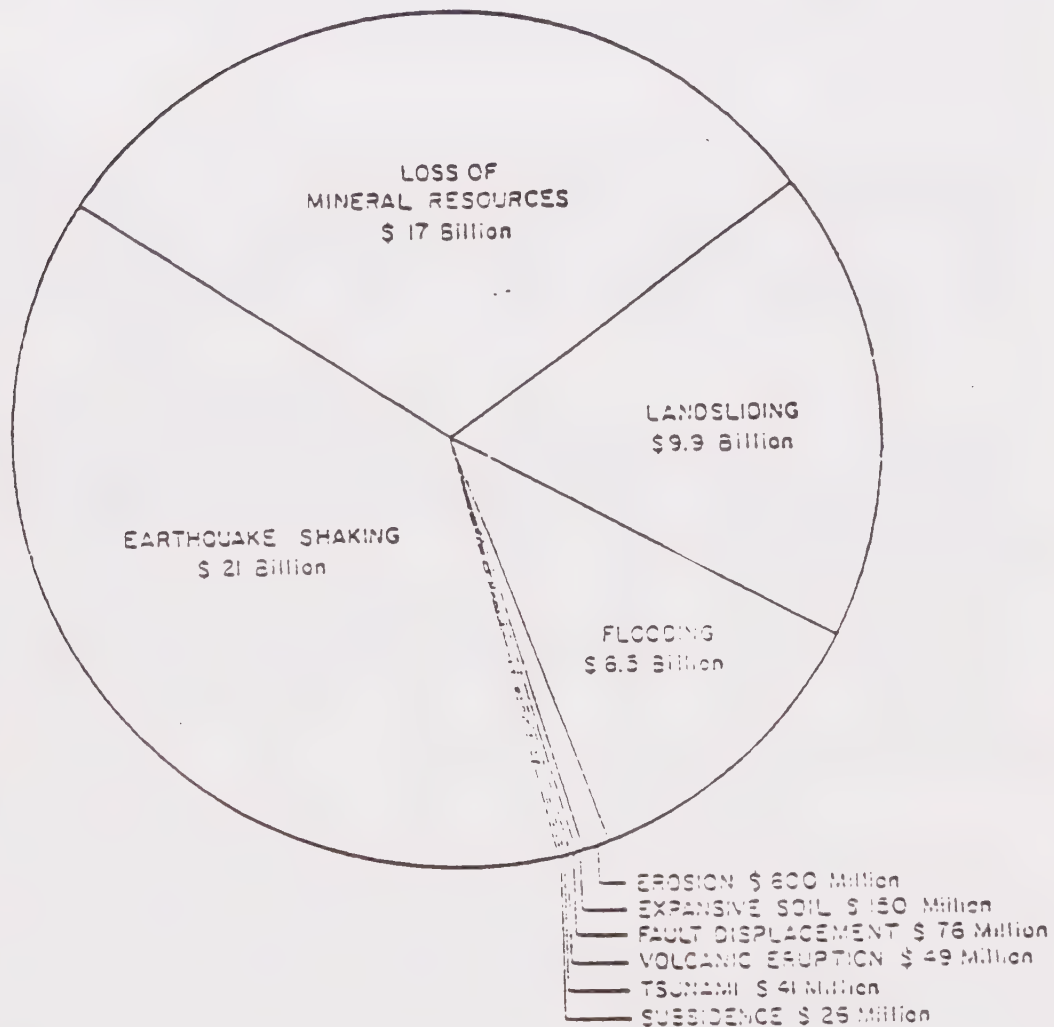
An initial assessment of the status of disaster preparedness with respect to natural hazards provides the basis for a policy plan. Major topical areas discussed include: administration, critical buildings, and emergency services.

### RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Seismic Safety and Safety Elements are the major natural hazards analysis in the General Plan and, as such, have important policy implications for other elements in the Plan. In particular, the Seismic Safety and Safety Elements provide significant information for the Land Use, Housing, Open Space, and Circulation Elements. The elements, as well as affected area general plans, should be prepared or revised to give specific recognition to the technical data and policies adopted in the Seismic Safety/Safety Element.



GEOLOGIC HAZARDS IN CALIFORNIA  
TO THE YEAR 2000:  
A \$55 BILLION PROBLEM



SOURCE: California Division of Mines and Geology, Urban Geology Master Plan for California, Bulletin 198, Sacramento, California, 1973.



The Land Use Element, including Area General Plans, will be influenced most directly by policies which will regulate types and intensities of land uses in reason subject to significant natural hazards. Impacts of these regulations are particularly significant where combinations of individual hazard areas result in a high level of overall hazard.

The Seismic Safety/Safety Element also affects the Housing Element, primarily by identifying hazardous areas that may be unsuitable for housing.

These elements also identify areas which should be considered for open space designation in the Open Space and Conservation Elements. These areas include lands subject to fault rupture, high landslide or liquefaction risk, extreme fire hazard, flooding, and immediate inundation in the event of dam failure.

The Circulation Element should recognize that the transportation network in Riverside County will be hard hit in the event of a major earthquake or flood. An earthquake will affect primarily freeway overpasses, road bridges, and above grade railroad crossings. The effects expected will be similar to what occurred in the Sylmar-San Fernando Valley areas of Southern California in the 1971 earthquake. The response spectra presented in the Technical Report should be used as a guide by structural engineers in the evaluation of existing freeway overpasses and other important grade separations. New construction of bridges, overpasses, and other above grade crossings should also utilize seismic response design criteria.

In the event of a 100-year flood some major highways may be inundated. This is expected to have an important impact on potential evacuation of some urban areas, and alternative measures should be planned.

#### POLICY REPORT ORGANIZATION

This report has six chapters. Chapters I and II define the nature and intent of the Seismic Safety/Safety Elements. Each of the remaining chapters present a policy plan addressing a specific topic.

The policy plans utilize four levels of official policy statements: goals, objectives, policies, and implementation measures. Each level exhibits greater specificity, with the most general goals at one end of the spectrum and implementation measures at the other. Each level is an integral component of the policy plan, and when considered together constitute the official statement relating to seismic and other natural hazards.



- A goal is an expression of a general, ultimate ideal to be sought. It reflects basic community values and establishes the emphasis for formulating objectives, policies, and implementation measures. They are general, often timeless, and therefore do not lend themselves to measurement.
- An objective is an element of a goal, the attainment of which constitutes partial goal fulfillment. Objectives usually specify what is to be accomplished within a given time period and are therefore often quantifiable. They serve as indicators by which progress toward a goal may be evaluated.
- A policy is a component part of an objective. It establishes the ground rules which direct the County's energies and resources toward the accomplishment of the objectives and hence the goals. A policy relates to the day to day activities of the decision-making process by identifying the range of actions that are appropriate, in order to remain consistent with, and therefore achieve, the goals and objectives.
- An implementation measure is specific action which, when accomplished, represents a step toward realizing the goals, objectives, and policies of the plan. An implementation measure may be a simple task or a complete program. For the purpose of these elements, four categories of implementation measures are utilized, based upon the priorities existing at the time of element adoption. As part of the annual review of this element, the assignment of implementation measures to a specific category will be assessed in terms of changing priorities and demands on fiscal and staff manpower resources. The categories which are utilized are as follows:

Phase I: to be initiated or implemented upon or immediately following element adoption

Phase II: to be initiated in the Short, Medium, or Long Range as priorities or resource constraints dictate.

Implementation programs involve many different County departments. The Planning Department will be the coordinating agency, informing various departments of their responsibilities as outlined in this element and assisting in



program formulation where necessary. The intent is to integrate the different implementation programs so that the element objectives are achieved in an orderly and timely manner.

#### DEFINITION--RISK DETERMINATION

The determination of "acceptable risk" is at once both simple, and exceedingly complex. The Council on Intergovernmental Relations (CIR) defines three categories of "risk" from natural and man-made hazards.

- Acceptable Risk: The level of risk below which no specific action by government is deemed to be necessary.
- Unacceptable Risk: The level of risk above which specific action by government is deemed to be necessary to protect life and property.
- Avoidable Risk: A risk which need not be taken because individual or public goals can be achieved at the same, or less, total "cost" by other means without taking the risk.

These somewhat simplistic definitions mask the problem of determining how many deaths, injuries, and dollars lost, are "acceptable" to a community. A somewhat different approach, implied by the California Legislature's Joint Committee on Seismic Safety, provides the basic rationale for this Element. The basic conclusions arrived at by this Committee in their Final Report<sup>2</sup> include:

- There is no uniform level of risk acceptable to the public;
- Maximum safety is desirable;
- Demands for increased safety must be related to costs;
- These demands vary with time, place, occupation, culture, and other factors, including subjective feelings, emotional reactions, and irrational considerations;

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<sup>1</sup> Council on Intergovernmental Relations, General Plan Guidelines, Sacramento, September, 1973, p.IV-26

<sup>2</sup> Joint Committee on Seismic Safety, California Legislature. Meeting the Earthquake Challenge--Final Report, Sacramento, California, January, 1974, pp. 179-180.



- Reduced risk is attainable at a cost with present technology.

It is acknowledged that a hazard-free environment is an impossibility. Natural hazards, in the absence of development, generally pose only limited danger to man. With the introduction of man-made structures, or facilities, existing natural "hazards" become "risks". In an attempt to minimize these risks, various codes and ordinances have been adopted, including health and building codes, which generally define what is unsafe. While some unsafe conditions exist because of limited technology, resources, or different priorities, it does not necessarily mean that these risks are acceptable. They must be tolerated, however, until improved technology, additional resources or reordered priorities permit their reduction. In this sense, "acceptable risk" is that which cannot, for a variety of reasons, currently be reduced. It should be apparent that what is determined to be "acceptable" changes as technology, resources and priorities change.

There are three basic tenets upon which a modified risk determination of "unacceptable risk", is based. First, no perceivable risk is "acceptable", only tolerated. Second, in light of limited resources and technology, some risk must always be tolerated. Third, criteria can be selected with which to identify risks that are unacceptable. Following this line of reasoning, the following definitions are in order:

- Tolerated Risk: Risks to life and property that are not currently being reduced due to technological limitations, limited resources, or existing priorities.
- Unacceptable Risk: Risks to life and property that must be reduced by on-going government and private action programs.

#### DETERMINATION PROCESS

The determination of what constitutes "unacceptable risk" involves the appraisal of: the degree to which the risk is perceived; the probability of the event; potential severity of losses; and the ability to reduce the risk.

#### Risk Perception

The extent to which the community and decision-makers perceive both the hazard and their capability to alter its potential effects, influences the level of commitment to risk reduction. Risk perception is influenced by recency of event; a damaging flood usually results in demands for effort to reduce the community's susceptibility in the future. It is possible, through educational programs, to raise the level of risk perception.



## Probability of Event

A central concept used in determining risk is the definition of hazardous natural events in terms of magnitude and frequency. The magnitude of an event refers to its size. Examples are the height of flood waters, the rating of an earthquake on the Richter scale, or the number of acres burned in a wildland fire. The frequency of an event refers to the number of times it occurs during a certain period of time. That is, the less often an event occurs, the greater is its size and potential impact. For example, rainstorms occur annually in the County, but most often they are of low magnitude. However, on relatively infrequent occasions as in January of 1969, a storm of great magnitude will occur and result in destructive flooding.

There is one important difference between flooding and earthquakes. Flooding is the result of a random combinations of meteorological events, whereas current geologic theory indicates that the buildup of strain along a particular fault system is nearly constant and the periodic release of that strain in the form of an earthquake is apt to be regular. This type of risk can be described as the risk of occurrence. That is, the risk described by a "recurrence interval" is the risk that the hazardous event will occur within the same time interval.

The magnitude-frequency concept is important in decisions regarding risk in that a judgment must be made regarding what magnitude event should be planned for. That judgment is based on the frequency or "recurrence interval" of the hazardous event. For example, by compiling and evaluating information regarding past flooding, the level of flooding an area can expect to experience every 50 years, 100 years, etc. can be determined. Similarly, by studying the area's earthquake history, determinations can also be made regarding the magnitude of earthquakes that can be expected at various intervals. A description of the magnitude and other characteristics of the event are then developed through a technical analysis. This information allows planners and engineers to develop loss-reduction programs to reduce or eliminate unacceptable risk. For example, it is common practice to designate hazardous flood plains and to design flood-control works according to the characteristics of the 100-year flood.

The risk of earthquake should be considered in similar manner. Utilizing the 50 to 100 year event as a minimum, structures should be designed based on their importance and the seismic hazards which exist where they are to be located. Where a higher level of protection is desired, such as for hospitals, the Planning Department Engineering Geologist and Building Department may determine that design levels should be increased from the Uniform Building Code to protect against earthquakes or other natural hazards with longer recurrence intervals. In this sense, the magnitude earthquake or flood used in determining risk may be thought of as a "design earthquake" or "design flood."



On May 9, 1975 technical representatives and elected officials of all participating jurisdictions met with ENVICOM corporation. The purpose of the meeting was to determine the earthquake magnitudes to be assigned to each of the three major faults in evaluating expected earthquake shaking. This Conference selected the magnitudes and recurrence intervals shown in Table II-A.

The method of determining probability of wildland fires differs somewhat from the used with flooding and seismic hazards. It is generally true that the longer the interval between fires, the greater the possibility of a major conflagration due to extreme fuel buildup. The determination of hazard levels based upon weather, topography, and vegetation must be supplemented with information regarding fire flows, human proximity, etc. in order to determine risk. The approach of identifying unacceptable risk will simplify this determination.

TABLE 19.1

SUMMARY OF EXPECTED EARTHQUAKE  
MAGNITUDES AN ACCEPTABLE RISK  
FOR FOUR USE CATEGORIES FOR  
POTENTIALLY DAMAGING EARTH-  
QUAKES IN RIVERSIDE COUNTY.

Use Category (Importance Rank)	Recurrence Interval (Years)	Earthquake Magnitude (Richter) for the following faults:		
		San Andreas	San Jacinto	Elsinore
A**	Max. Credible	8.0*	7.5*	7.0*
B	200-500	7.5*	7.0*	6.0
C	100-200	7.0*	6.5*	5.5
D	50-100	6.5*	6.0	5.0

\* Probably accompanied by fault rupture to surface. Other magnitudes may also be accompanied by fault rupture to surface.

\*\* Uses are defined in Tables II-C and II-D.

SOURCE: Riverside County, Seismic Safety/Safety Element Technical Report, Volume I, September, 1976, p.61.



### Severity of Potential Losses

The risk of damage or loss of life is more complex, and involves evaluating and combining with risk of occurrence, the risk of severe damage or collapse of a structure and the probability of certain occupancies. Potentially-damaging natural hazards interact with man-made structures. If a structure is unable to accommodate the natural event, failure will occur. The potential for such failure is termed a structural hazard, and includes not only structures themselves, but also the potential for damage or injury that could occur as the result of movement of loose or inadequately restrained objects within, on, or adjacent to a structure.

The determination of unacceptable risk from hazardous events also involves separating structures into categories according to their potential effect on loss of life and injury and their importance in terms of continued community functioning. In the hours immediately following the 1971 San Fernando earthquake in Southern California, emergency services were impaired by damage to such essential structures and facilities as police and fires stations, communication networks, and utility lines. Several hospitals were seriously damaged and unable to continue functioning. These and other similar facilities are vital to the community's ability to respond to a major disaster and to minimize loss of life and property. The experience in San Fernando emphasized the need to provide these "critical or essential facilities" with a higher level of protection from earthquakes than "limited" or "normal" occupancy structures or other non-critical structures. As a minimum, all structures which could have an effect on the loss of life should be designed to remain standing in the event of a major natural disaster even if rendered useless. Critical facilities on the other hand, should not only remain standing, but should be able to continue providing essential services in the event of a disaster. The Classification of Structures and Facilities (Table II-B) is to be used as a guide in evaluating the importance of each facility relative to overall public safety.



## CLASSIFICATION OF STRUCTURES AND FACILITIES

	Safety Characteristic			Safety Standard	
	Major Loss of Life Potential	Disaster Response	Vital Function	Normal	Special
RESIDENTIAL					
• Single Family				•	
• Multifamily ( <100)				•	
• Mobilehome				•	
• Multifamily ( >100)	•				•
COMMERCIAL/INDUSTRIAL					
• Neighborhood Centers (grocery, drugstore, etc.)				•	
• Office Buildings	•				•
• Small Hotels, Motels		•		•	
• Mfg/Storage of Dangerous Material	•				•
• Large Commercial Facilities, Shopping Centers	•				•
• Large Hotels	•	•			•
• General Commercial, Light Industrial Uses				•	
• Health Care Clinics		•		•	
• Warehousing				•	
PUBLIC/QUASI-PUBLIC USES					
• Hospitals, Convalescent Homes	•	•	•		•
• Ambulance Services		•			•
• Emergency Operation Center		•	•		•
• Fire, Police, Emergency Communication Facilities		•	•		•
• Electric Inter-tie Systems, Utility Plants		•	•		•
• Large Dams	•		•		•
• Small Dams	•		•		•
• Nuclear Generating Plants	•		•		•
• Bridges, Overpasses		•	•		•
• Schools	•	•			•
• Churches	•			•	
• Secondary Utility Structures		•			•
• Government Offices	•	•	•		•
• Theatres, Auditoriums (capacity 100)	•	•			•
• Sewage Treatment Plants			•		•
• Linear Systems		•	•		•



It is apparent that risks may be related to both potential loss of life or injury and the specific function of a structure or facility. An important precept is the idea of recognizing "involuntary" risk. Where there is little or no option afforded an individual as to whether or not he will accept a risk, such as in a hospital, school, or other governmental building, the risk should be minimal. In light of the fact that different structures and uses exhibit varying safety requirements, four categories of "importance" were identified, based upon potential loss of life, need for disaster response; and need as an essential community function. Table II-C illustrates the importance ranking of these categories, representative structures or uses included in each, and the magnitude and recurrence interval to be incorporated into the structural design.

The first category Critical, includes uses whose collapse poses extreme, if not catastrophic, hazards to life, property and community functioning. Collapse of these structures or facilities is clearly unacceptable and the highest level of safety is mandatory. Critical structures and facilities may suffer some damage in a natural disaster, but must not pose a threat to human life. The use of advanced theories and design concepts may be necessary in order to establish as fail-safe a structure as is feasible. A nuclear power plant is perhaps the most obvious example of a use in this highest importance category. Design characteristics must be based upon a detailed site investigation.

The second importance category, Essential, includes uses whose collapse could severely impair the community's ability to recover from a natural disaster. It is recognized that there may be some temporary service disruptions because of damage to individual facilities; however, these should not impair the community's recovery effort since delivery systems as a whole can continue supplying essential services. Maximum feasible safety, utilizing existing technology, is required, and the use of redundant systems may be necessary where feasible.

The third category, Normal-High Risk, includes structures or facilities which because of emotional reasons, high occupancy, or potential use in disaster response operation, should not collapse and should afford occupants a high level of safety. It is recognized that some damage, including structural, and injury may occur, but loss of life would be rare. Design standards should minimize the possibility of structural collapse.



The fourth category, Normal-Low Risk, includes the vast majority of structures. the criteria advanced by the Structural Engineers Association of California for "ordinary" risk structures are:

- Resist minor earthquakes without damage;
- Resist moderate earthquakes without structural damage, but with some nonstructural damage;
- Resist major earthquakes, of the intensity or severity of the strongest experienced in California, without collapse, but with some structural as well as nonstructural damage;
- In most structures it is expected that structural damage, even in a major earthquake, could be limited to repairable damage.

#### Capability to Reduce Risk

The technological ability to reduce risks must be assessed, as well as available fiscal and manpower resources and priorities for their allocation. The determination that the failure, or loss of function, of certain structures or facilities is not acceptable will likely require both a reordering of priorities and additional resources.

#### RISK DETERMINATION

Carrying the determination of risks that Riverside County is unwilling to accept further, the suitability of each importance category is illustrated for each hazard zone (Table II-D). For instance, a particular use may be Generally Suitable, Provisionally Suitable, Generally Unsuitable, or Restricted depending upon the groundshaking zone and geologic structure, relationship to flood plains, or susceptibility to wildland fires. Obviously a table of this type has limitation. While this table does relate structure to potential hazard, it is intended for general planning purposes and detailed site investigations and engineering studies may be necessary for certain structures or uses.

The inclusion of public utilities in Tables II-C and II-D is not intended to put the County in the position of being an additional approving or monitoring agency for the utilities. It is recognized that the California Energy and Public Utilities Commissions have pre-empted local jurisdiction over the regulation of public utilities. However, both Commissions are required to seek local input to their approval of construction and operating procedures for public utilities. Tables II-C and II-D are intended to provide that comment.



TABLE 19.3

## ACCEPTABLE RISK SEISMIC EVENTS FOR RIVERSIDE COUNTY

Use Category	Category Type	Typical Structures, Facilities, Uses	Recurrence Interval	San Andreas	San Jacinto	Elsinore
A	Critical	Nuclear related systems; major dams; explosives or hazardous materials manufacturing, handling, or storage; hospitals and other emergency medical facilities.	Maximum Credible	8.0*	7.5*	7.0*
B	Essential	Police, fire and communications systems; Emergency Operations Centers (EOC's); electric power inter-tie systems; power plants; small dams; utility substations; sewerage treatment plants; waterworks; local gas and electric distribution lines; aqueducts; major pipelines; major highways, bridges and tunnels; ambulance services; public assembly with capacity of 300 or more; schools.	200-500	7.5*	7.0*	6.0
C	Normal-High Risk	Multi-family residential > 100 units; major commercial including large shopping centers; office buildings; large hotels; health care clinics and convalescent homes; heavy industry.	100-200	7.0*	6.5*	5.5
D	Normal-Low Risk	Single-family residential; multi-family < 100 units; small scale commercial; small hotels, motels; light industrial; warehousing.	50-100	6.5*	6.0	5.0

\*Probably accompanied by fault rupture to surface.

\*To be considered as a part of specific site investigations, and not included as a part of this study.



TABLE 19.4  
LAND USE SUITABILITY

## SEISMIC, SECONDARY SEISMIC, FLOOD AND FIRE HAZARDS ZONES

[illegible]SUMMARY OF LIQUEFACTION POTENTIAL  
FOR AREAS IN RIVERSIDE COUNTY, CALIFORNIA\*

Soil and Groundwater Characteristic (Typ Symbols)	Liquefaction Potential for Groundshaking Zone as follows:				
	I	II	III	IV	V
Recent alluvium, groundwater shallower than 10 feet ( $E_{LL}$ , $D_{LL}$ or $E_{LL}$ )	Moderate	Moderately high	High	High	High
Recent alluvium, groundwater between 10 and 30 feet ( $E_L$ , $D_L$ or $E_L$ )	Moderate	Moderate	Moderately high	High	High
Pleistocene alluvium, groundwater shallower than 10 feet ( $D_{LL}$ )	Low	Moderate	Moderate	Moderate	Moderately high
Pleistocene alluvium, groundwater between 10 and 30 feet ( $D_L$ )	Low	Low	Moderate	Moderate	Moderate

\*This is a simplification of Table 21 of the Technical Report.

ies (the categories are based upon the table to the right.)



## SEISMIC AND GEOLOGIC HAZARD POLICY PLAN

### INTRODUCTION

Earthquakes are the result of an abrupt break or movement of rock, producing shock waves which move through the relatively brittle crust of the earth. If the area of the break is small and limited to the deeper part of the crust, the resulting earthquake will be small. However, if the break is large and extends to the surface, a large earthquake, capable of major destruction, will result. The breaks in the earth are called "faults". In California, faults are extremely common, varying from minor cracks to major fault zones such as the San Andreas. Fault zones may include only one fault or many, depending on the complexity of faulting in the area. Major fault zones within Riverside County include the San Andreas, the San Jacinto, and the Elsinore.

Faults exhibit different types and rates of movement. The various types of fault movement are illustrated in Figure III-1. The forces responsible for mountain building exert great pressures in the earth's crust and cause crustal blocks to move in relation to each other. The result is a steady build-up of strain as rocks resist the pressure. Eventually, the strain becomes so great that it overcomes the strength of the rocks, which then break and snap back into an unstrained position. Usually, the resistance of rocks along an active fault is small and numerous adjustments, expressed as slow, creeping movements, or small earthquakes, are made. In some cases, the strength of the rock is very great, allowing strain to build to massive proportions. When the strain finally becomes great enough, the tremendous pressure is released, resulting in a major earthquake.

The major hazard posed by the slow, almost imperceptible type of movement known as "fault creep" is damage from surface fault rupture. Fault creep may extend to the ground surface, posing a hazard to structures located astride the fault. Over time, streets, building, and other structures located astride a fault may be seriously damaged. Surface movement rarely occurs in earthquakes smaller than magnitude 6.0 on the Richter Scale. On the other hand, fault movement in a major earthquake may occur suddenly, extend to the surface, and amount to several feet. The primary hazard in a major earthquake is, of course, ground shaking. The severity of groundshaking depends on the size of the earthquake and local geologic and soils conditions. Another aspect of groundshaking in an earthquake is the initial rapid ground movement. This movement can occur at fast enough speeds to tear homes off their foundations.

Since faults vary as to the likelihood of their being the source of an earthquake, considerable effort has been, and is continuing to be, expended by geologists and seismologists to



determine and delineate the faults likely to generate significant earthquakes. The State Mining and Geology Board (1973), for purposes of the Alquist-Priolo Special Studies Zones Act (Chapter 7.5, Division 2, Public Resources Code, State of California), "regards faults which have had surface displacement within Holocene time (about the last 11,000 years) as active and hence as constituting a potential hazard."

The State Geologist (Slosson, 1973, Explanation of Special Studies Zones Maps, pp. 3 and 4) defines a potentially active fault as one "considered to have been active during Quaternary time (last 3,000,000 years)--on the basis of evidence of surface displacement." The State Geologist knows the contrast with the State Mining and Geology Board, but also states: "An exception is a Quaternary fault which is determined, from direct evidence, to have become inactive before Holocene time (last 11,000 years)."

The definitions above are compatible if taken in the following sequence:

- A potentially active fault is one which exhibits evidence of surface displacement during Quaternary time.
- A potentially active fault will be considered as an active fault if there is evidence of surface displacement during Holocene time.
- A potentially active fault will be considered as inactive if, by direct evidence, it can be shown that there has been no displacement during Holocene time.

While the above time periods may seem excessive for determining the potential activity of a fault, 3,000,000 years and 1,000 years are relatively short time periods when compared to the age of the earth. It may take thousands or even millions of years to generate the strain necessary to cause a major earthquake.

The size of an earthquake is described in two ways: by the amount of energy released and by observations of its effects in different areas. "Magnitude" refers to the energy released by an earthquake and is measured on the Richter Scale. An increase of one magnitude on the Richter Scale is equivalent to an increase of about 31 times in energy release. "Intensity" is the subjective evaluation of the effects of an earthquake at a particular location. Intensity is expressed on the Modified Mercalli Scale of 1931, which includes twelve categories (I to XII) ranging from "not felt except by a few under very favorable circumstances" to "damage total". It is important to remember that intensity is a subjective, general description of the effects of an earthquake and depends not only on the magnitude of the event, but also on distance from



the epicenter, local geologic conditions, and quality of construction. Thus, while an earthquake has only one magnitude, it will have several intensities.

## TECHNICAL SUMMARY

### Primary Seismic Hazards

Ground Shaking. The principal seismic hazard in Riverside County is strong to severe ground shaking accompanied by ground rupture generated by movements of faults within the San Andreas, San Jacinto, or Elsinore fault zones. Relative ground shaking hazards were developed in the Technical Report by dividing the County into five zones based on distance from causative faults and soil type. The distances zonations are entirely arbitrary and were defined in the technical report so that Zone 1 includes ground acceleration for average site conditions up to that taken into account in the 1973 Uniform Building Code. Zone 1 represents the areas where the least amount of ground shaking is expected, and Zone V includes areas where the most severe ground shaking is expected.

The effects of the different magnitude earthquakes expected from the three faults is accommodated by varying the widths of the zones. That is, the zone boundaries are closer to the San Jacinto fault than the San Andreas fault because the earthquakes expected on the San Andreas are larger, and the same level of shaking will extend to a greater distance from the fault. Also, the higher zones are not present along the Elsinore fault because the source of shaking will be deep, and the distance to the source cannot decrease below about 5 miles even at the surface trace of the fault.

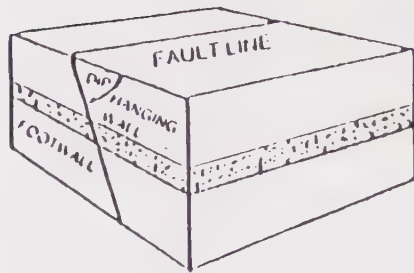
Five general soil types, base upon different ground shaking characteristics (bedrock, alluvium of intermediate thickness, thick alluvium and soft sediments, thin Pleistocene alluvium, and thin Recent alluvium), were identified. The five soil types (A-E) combine with the five distance zones (I-V) to produce 25 microzones. The microzones are mapped in Volume II of the Technical Report. The generalized characteristics of expected shaking are summarized in Table 20 of the Technical Report and response spectra as Figure 57 through 81. The suitability of the microzones for various uses is summarized in Table II-2 of the Policy Report.

Surface Fault Rupture. The intent of the Alquist-Priolo Special Studies Zones Act is to provide for public safety from fault rupture hazards by avoiding, to the extent possible, the construction of structures for human occupancy astride hazardous faults. The precise location and identification of hazardous faults within or near a zone of potentially active faults can be determined only through detailed geologic investigations. Thus, the Act establishes the concept of a Special Studies Zone--an area of limited extent centered on recognized



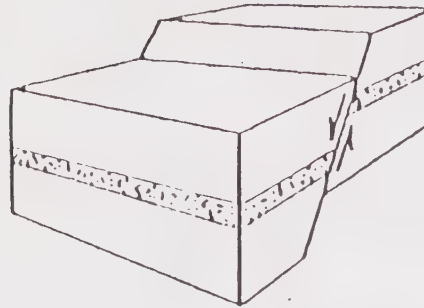
## TYPES OF FAULT MOVEMENT

### COMPONENTS



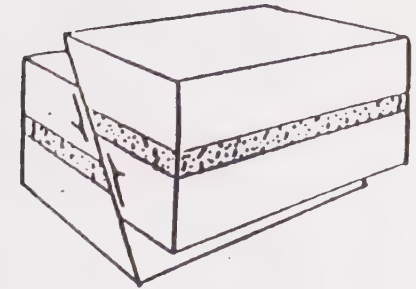
Names of some of the components of faults.

### NORMAL FAULT



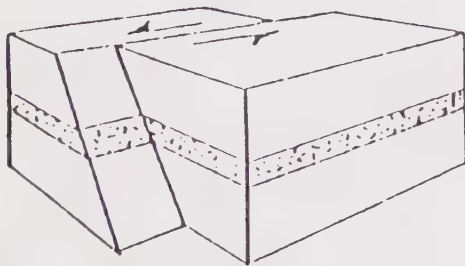
Normal fault, in which the hanging wall has moved down relative to the foot wall.

### REVERSE FAULT



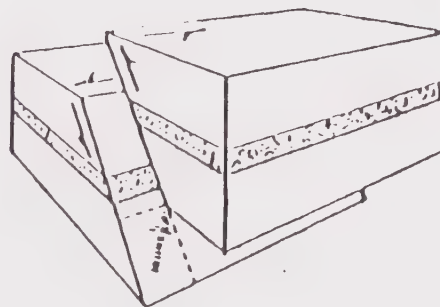
Reverse fault, sometimes called thrust fault, in which the hanging wall has moved up relative to the foot wall.

### LEFT LATERAL FAULT (STRIKE-SLIP)



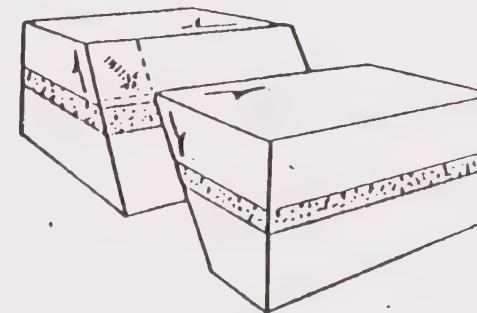
Lateral fault, sometimes called strike-slip fault, in which the rocks on either side of the fault have moved sideways past each other. It is called left lateral if the rocks on the other side of the fault have moved to the left, as observed while facing the fault. Right lateral if the rocks on the other side of the fault have moved to the right, as observed while

### LEFT LATERAL REVERSE FAULT (LEFT OBLIQUE REVERSE FAULT)



Left lateral reverse fault sometimes called a left oblique reverse fault. Movement of this type is a combination of left lateral faulting and reverse faulting.

### LEFT LATERAL NORMAL FAULT (LEFT OBLIQUE NORMAL FAULT)



Left lateral normal fault, sometimes called a left oblique normal fault. Movement of this type of fault is a combination of normal faulting and left lateral faulting.



faults, although faults other than those depicted on the maps may be present within the zone. Within the Special Studies Zone a geologic study which "shall define and delineate any hazard of surface fault rupture" is required of any new estate development which contemplates the eventual construction of structures for human occupancy subject to the Subdivision Map Act, and any construction of structures for human occupancy other than single-family, wood frame dwellings or mobilehomes intended for use as single-family, wood frame dwellings or mobilehomes intended for use as single-family dwellings. Specific provisions of this Act are included in Chapter 7.5 Division 2, of the Public Resources Code and reflected in Riverside County Ordinance 547.

The Act requires the State Geologist to delineate appropriately wide special studies zones on all potentially and recently active faults that constitute a potential hazard to structures from surface faulting or fault creep. Phase I of the program delineated zones along the San Andreas, San Jacinto, Hayward, and Calaveras faults. As part of Phase II, the State Geologist will prepare Special Studies Zones maps for the Elsinore fault zone.

Geotechnical evidence contained in the Technical Report indicates that special regulations are needed along certain faults in the County until such time as the State Geologist includes them in a Special Studies Zone or geotechnical evidence shows them to be inactive. Thus, the concept of a Hazard Management Zone was developed. A Hazard Management Zone would be established by the County to require geologic studies along certain faults not yet included in Special Studies Zones. The requirements for a Hazard Management Zone would be the same as for a Special Studies Zone. Therefore, upon adoption of this element, an amendment to Riverside County ordinance 547, which implements the Alquist-Priolo Act should be seriously considered in order to establish Hazard Management Zones along the Casa Loma, Elsinore, Glen Ivy, Willard, Wildomar, Banning, and Cherry Valley faults.

San Andreas Fault Zone. The San Andreas fault zone is the longest and best studied fault in California. In Riverside County, the San Andreas fault zone includes two major branches. (Refer to Seismic Safety/Safety Element Policy Report Map.) The Mission Creek branch is the more active, and was the source of the 1948 Desert Hot Springs earthquake. The Banning fault is located to the south of the Mission Creek branch, generally following the northern edge of the San Geronio Pass. The active and potentially active faults of the San Andreas fault zone have been mapped by the State Geologist as required by the Alquist-Priolo Special Studies Zones Act.

In Riverside County, recurrence intervals and magnitudes of earthquakes expected along the San Andreas fault zone are as follows:



<u>Magnitude</u>	<u>Recurrence Interval (Years)</u>
------------------	------------------------------------

8.0*	Maximum Credible
7.5*	200-500
7.0*	100-200
6.5*	50-100

\*Probably accompanied by fault rupture to surface

San Jacinto Fault Zone. The San Jacinto fault zone extends from Cajon Pass to Mexico as a series of parallel and branching segments which form a relatively continuous fault zone. The two main branches are the Casa Loma and San Jacinto faults. Other segments considered active or potentially active include the Hot Springs fault east of San Jacinto, and the Buck Ridge and Coyote Creek faults to the south. The active and potentially active faults of the San Jacinto zone have been mapped by the State Geologist as required by the Alquist-Priolo Special Studies Zones Act with one exception, the extension of the Casa Loma fault northwest to Reche Canyon. Although this has not been included on the Alquist-Priolo maps issued by the State, geotechnical evidence contained in the Technical Report indicates the need for a Hazard Management Zone.

In Riverside County, recurrence intervals and magnitudes of earthquakes expected along the San Jacinto fault zone are as follows:

<u>Magnitude</u>	<u>Recurrence Interval (Years)</u>
------------------	------------------------------------

7.5*	Maximum Credible
7.0*	200-500
6.5*	100-200
6.0	50-100

\*Probably accompanied by fault rupture to surface

Other Faults. While emphasis has been placed on the three major fault zones, several other fault zones or groups can be considered at least potentially active. The general area of the Blue Cut fault in Joshua Tree National Monument is seismically active, but there is no definitive alignment or concentration of epicenters to suggest the fault itself is seismically active. The Salton Creek fault south of the Orocoopia Mountains is considered potentially active by the State; however, the general area is seismically "quiet", and there is no alignment of epicenters to suggest recent activity. Three



faults in the Chuckwalla Mountains and two in the Mule Mountains are shown as potentially active by the State. These areas are also seismically "quiet" fault located outside Riverside County that could cause ground shaking within the County include the Newport-Inglewood fault to the west and the Pinto Mountain fault to the north. The Newport-Inglewood fault is sufficiently west of the County that probable shaking levels are not expected to exceed those from faults within the County. The Pinto Mountain fault, however, will increase shaking levels locally in the north-central part of the County.

### Secondary Hazards

Settlement. Settlement may occur in poorly consolidated soils during earthquake shaking as the result of a more efficient rearrangement of individual grains. Settlement of such proportion as to cause significant structural damage is normally associated with rapidly deposited alluvial soils, or improperly founded or poorly compacted fills. The former are apparently common in some areas of Riverside County, and should be of concern in soils engineering investigations. Significant settlement due to ground shaking occurred northwest of San Jacinto in the 1899 earthquake. The problem of differential settlement of poorly consolidated soils does not appear to be limited to the Hemet-San Jacinto area. Settlement may also be a hazard in portions of the Riverside, Corona, Sunnymead, Beaumont, Perris, Desert Hot Springs, Cove Communities, Indio-Coachella, Murrieta Valley, and other areas where loose alluvial soils can be found.

Liquefaction. Liquefaction involves a sudden loss in strength of a saturated, cohesionless soil (predominantly sand), which is caused by shock or strain, such as an earthquake. This results in a temporary transformation of the soil to a fluid mass. If the liquefying layer is near the surface, the effects on any structure located on it are much like that of quicksand. If the liquefying layer is below the surface, it may provide a sliding surface for the material above it. Liquefaction typically occurs in areas where groundwater is found less than 30 feet below the surface, and where soils are composed primarily of poorly consolidate fine-grained sand. Table 21 of the Technical Report summarizes liquefaction potential based on the ground shaking, soil, and groundwater characteristics mapped in Volume II.

Areas in which liquefaction poses a particularly significant hazard include the Recent Alluvium along the Santa Ana River near Riverside, Norco, and Corona; in the Murrieta Valley near Rancho California; and in a broad area in the southern Coachella Valley including portions of Indio, Coachella, and Thermal.

Landslides. Landslides should be considered a basic geologic hazard, rather than one having an unusual association with earthquakes. The shaking of an earthquake only provides the



triggering force to initiate downslope movement of a previously unstable earth mass. The prime factor is the unstable condition itself and movement could be triggered by heavy rains or grading for construction as well as by a seismic event.

Relative landslide risks have been mapped as part of the Area Maps in Volume II of the Technical Report. While landslide potential is limited in the County, one of the larger landslides in the State is present on Martinez Mountain west of Mecca. Other areas subject to landslides are the San Timoteo badlands, the "Bautista beds" east of Hemet, and the sedimentary rocks west and southwest of Corona. In addition, hilly areas weakened by intense faulting as alongside the San Jacinto Valley and the San Gorgonio Pass are particularly susceptible to landsliding.

Tsunamis and Seiches. Tsunamis, commonly called "tidal waves" are caused by fault movement on the ocean floor, and commonly affect low-lying coastal areas. They will have no effect on the study area.

Seiches are waves produced in a standing body of water by winds, atmospheric changes, earthquakes waves, etc. Studies of true seiches are limited, but indicate that true seiches do not pose a significant hazard in the County's lakes and reservoirs. However, strong seiching may be set up in storage tanks located close to a fault. Some storage tanks suffered severe damage in the 1971 San Fernando earthquake.

Waves set up in water bodies by seismically induced landsliding or tilting are sometimes incorrectly referred to as seiches. Severe damage occurred as the result of waves set up by landsliding or tilting of the reservoir bottom in 1959 at Hebgen Lake in Montana and in 1964 at Kenai Lake in Alaska. Major landsliding is not expected in the reservoirs of the County, and tilting of the type described above would probably be limited to the area north of the Banning fault where there are no major reservoirs. Tilting could significantly affect Lake Elsinore in the event of a major earthquake accompanied by ground rupture on a fault near the lake. However, this would be a maximum credible event, and is probably a tolerable risk when compared to measures required to mitigate the hazard.

## GOALS

To minimize loss of life, injury, damage to property, and social and economic dislocations resulting from seismic and geologic hazards.

## OBJECTIVES

1. To incorporate seismic and geologic hazard considerations into the County planning and development review process.



2. To identify areas of significant seismic and geologic hazards and promote special land use regulations for those areas.
3. To consider and utilize state-of-the-art advancements relating to mitigation of seismic and geologic hazards.
4. To encourage more detailed scientific analysis of seismic and geologic hazards.
5. To encourage the identification, evaluation, and mitigation of existing structural hazards that are related to seismic considerations.
6. To promote standards that will enable Critical and Essential structures or facilities to remain functional.
7. To promote public awareness of seismic and geologic hazards as a factor in assessing property.
8. To encourage the consideration of seismic and geologic hazards as a factor in assessing property.

## POLICIES

1. Recognize seismic and geologic hazards as significant constraints when determining suitable land uses and densities within an area. (Objective 1).
2. Provide for the orderly administration and implementation of the Seismic Safety/Safety Element Program. (Objective 1)>
3. Require soils and seismic/geologic investigations when proposed uses may be subject to unacceptable risks due to significant seismic or geologic hazards. Where hazards cannot be adequately mitigated certain land uses may be prohibited. (Objectives 1,2,4).
4. Utilize data contained in the Technical Report in determining the type and intensity of land use that is acceptable in areas of significant seismic or geologic hazard. (Objectives 2, 3, 5).
5. Provide for the incorporation of new information and continuous review and periodic updating of the Seismic Safety/Safety Element Policy Report and Technical Report. (Objective 4).



6. Support programs which increase awareness of the nature and extent of natural hazards in Riverside County. (Objective 7).
7. Consider the susceptibility of property to identified seismic or geologic hazard as an important factor in valuation. (Objective 8).

## IMPLEMENTATION PROGRAM

### Phase I

- Develop a procedure for determining the suitability of land to support various types and intensities of use, incorporating seismic and geologic considerations as a basic component. (Policies 1, 2).
- Begin a program of incorporating seismic and geologic considerations into the various general plan elements, particularly land use, and all area plans. (Policies 1, 2).
- Request the State of California Geologist to include the following faults in the Special Study Maps: the Casa Loma, Chino, Elsinore, Glen Ivy, Willard, Wildomar, Banning, and Cherry Valley faults. In the interim period of time, recognize these fault areas when considering land use planning matters. (Policies 1, 4).
- Pursuant to the provisions of the Alquist-Priolo Special Studies Zones Act, prohibit development in any Special Studies Zone or Hazard Management Zone, until detailed geological evaluations of the fault are completed and acceptable building setbacks established. (Policies 3, 4).
- Where necessary, require soils and geologic engineering investigations to confirm or demonstrate the suitability of proposed uses in various hazard zones as identified in Table II-D of the Policy Report. This investigation should occur at the initial stages of the development process. (Policies 3, 4).
- Expand the Land Division Committee membership to include the Planning Department Engineering Geologist. (Policies 1, 2, 3, 4, 5).
- Encourage and assist school districts and agencies involved with the aged or handicapped to develop educational programs of their own. (Policy 6).
- Inform the Planning Department Engineering Geologist when major subsurface work is anticipated in a Special Studies or Hazard Management Zone to permit his evaluation of fault activity and location, whenever feasible, during the trenching phase. (Policy 5).



- The Planning Department Engineering Geologist will maintain a compilation of geologic report results along the San Jacinto, San Andreas, and Elsinore Fault Zones and recommend appropriate modifications of the Special Studies Zones to the State Geologist as the level of information warrants. (Policy 5).

## Phase II

### Short Range

- Request Caltrans, the County Road Department, and railroads to review their facilities, roadways, lines, and yards to determine the potential impact of expected earthquakes, and to forward comments to the County Planning Department. The Circulation Element of the General Plan and evacuation plans should be revised if necessary. (Policy 6).
- Begin a program of mapping expansive soils and erosion problems countywide.
- Establish a procedure by which the Assessor's Office will be informed of the susceptibility of property to significant natural hazards, including seismic and geologic concerns. (Policy 9).
- Review the Seismic Safety/Safety Element annually and comprehensively revise it every five years or whenever substantially new scientific evidence becomes available. (Policy 5).
- Encourage the notification of all prospective buyers of the susceptibility to and significance of natural hazards which may affect the subject property. Efforts to this end include: 1) encouraging the State Real Estate Commissioner to require all agents or brokers to inform the prospective buyer, 2) require that such information be recorded on all tentative or final land division maps; and 3) inform land title companies of the existence of hazards and encourage them to include this information in all title reports. (Policies 1, 2, 8, 9).

### Medium Range

- Institute a building strong-motion instrumentation program for building over four (4) stories in height, if such buildings are anticipated. (Policy 6).

### Long Range

- Expand the area of detailed mapping (1" = 2000') to include additional developed or developing areas within the County. (Policy 5).



- Incorporate the technical information contained in the Seismic Safety/Safety Elements into a Countywide computerized environmental data bank. (Policies 1, 2, 5).

#### 4. FLOOD HAZARD COMPONENT

##### INTRODUCTION

Riverside County has experienced severe flooding many times throughout its history, resulting in the loss of lives and over \$50 million in property damage. Like much of the nation, Riverside County faces an ever-increasing hazard due to floods if urban development continues to encroach onto the floodplains. Since floods are caused by rivers and creeks overrunning their banks, the original modern day solution to flood problems was seen as controlling the rivers and creeks themselves. The tremendous capital investments made in dikes, channels, levees, and dams over this century have not, however, eliminated flood hazards, as development has occurred without adequate protection in many areas. In some instances the protective facilities may be unable to accommodate the 100 year flood. Dollar estimates of damage in Riverside County attributable to flooding resulting from two storms in September 1976 totaled almost \$19 million dollars.

In recent years, the idea has become increasingly accepted that, while it is essential to protect existing development, the massive cost of providing flood control facilities for large areas such as Riverside County merely to permit the construction of new homes is often uneconomical. In many instances it is more desirable to keep people away from the flood, than to try keeping the flood away from the people. The basic economic premise is that if development on floodplains is limited, public costs for flood proofing and flood damages, can be minimized. The Federal Government, alarmed by rising costs of disaster relief, initiated the passage of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts is to reduce the need for large public expenditures for flood control works and flood relief by restricting development on floodplains.

##### NATIONAL FLOOD INSURANCE PROGRAM

Faced with steadily mounting costs for flood disaster relief and flood control works, it had become apparent by 1968 that the way to provide better protection against floods was not by constructing larger flood control structures, but rather to discourage development in areas subject to recurring inundation. In line with this philosophy, Congress enacted the National Flood Insurance Act of 1968, which established a program to reduce disaster relief costs by making flood insurance available in flood hazard areas, (the 100 year flood plain ) providing the community voluntarily entered the program. Community participation was contingent upon the jurisdiction adopting and enforcing appropriate land use regulations within identified flood prone areas. Riverside County established



eligibility in December, 1970 and flood insurance became available in January, 1971.

The Flood Insurance Act of 1968 was, however, generally unsuccessful nationally. In 1973, Congress passed the Flood Disaster Protection Act to overcome the deficiencies of its predecessor. This act makes participation mandatory if a community or individual wishes to acquire, refinance, or build within a flood hazard area using any federally-related financial assistance. This not only includes FHA, VA, and SBA loans, but also funds provided through federally regulated or insured institutions. Non-participation, then, means that it would be virtually impossible to acquire, refinance, or build within a flood plain. While non-participation might seem to be a means of restricting development in flood plains, it places an excessive burden on existing owners of land and structures in these areas. These owners could find it exceedingly difficult to sell their property. Additionally, in the event of a disastrous flood, no assistance from the Federal Government would be forthcoming to non-participating communities.

As with the 1968 act, a condition of participation is that the community must adopt flood plain management regulations meeting and minimum standards published by the Federal Insurance Administration. To meet these minimum standards, the community must require building permits for all new construction and substantial improvements, and review the permit to assure that sites are reasonably free from flooding. For its flood prone areas, the community must also require: (1) proper anchoring of structures; (2) the use of construction materials and methods that will minimize flood damage; (3) adequate drainage for new subdivisions; and (4) that new or replacement utility systems be located and designed to preclude flood loss. Once the final flood maps are received from HUD, the community must minimally require that all new construction in identified flood hazard areas be elevated or flood proofed to the level of the 100 year flood.

#### TECHNICAL SUMMARY

For the purpose of this element, the 100 year floodplain is of primary concern. Such a flood has a statistical likelihood of occurring once in one hundred years, or a one percent chance of occurring in any given year. The 100 year flood, or Intermediate Regional Flood, can occur in any given years, or even more than once in a single year, although such an event is not likely. The 100 year flood plain has been the commonly accepted standard for flood protection in new subdivisions within Riverside County since 1955.

#### Natural Flood Hazards

The five major water courses in riverside County are the Santa Ana River, San Jacinto River, the Temecula-Murrieta Creek System, the Whitewater-San Gorgonio River, and the Colorado



River. All of these river systems include numerous smaller tributaries that contribute to the overall drainage in the County. Each river system exhibits a different set of physical characteristics that influence flooding potential.

Whitewater-San Gorgonio River System. The Whitewater-San Gorgonio River System Drains the San Gorgonio Pass area, as well as the semi-arid desert regions of the Coachella Valley. It is a landlocked system, where all runoff is either lost through percolation, or flows into the Salton Sea, where it is subject to evaporation.

The San Gorgonio River originates in the San Bernardino Mountains and flows south through Banning, turning east at the base of the San Jacinto Mountains until it reaches the western limit of Palm Springs, where it joins the Whitewater River. The San Gorgonio River is joined by numerous tributaries which plunge out of the steep mountain canyons.

The Whitewater River originates on the mountainous slopes bordering the Coachella Valley and flows generally southward into the Salton Sea. It receives sizable contributions from its tributaries during periods of heavy runoff. Snowmelt and rising groundwater provide an almost continual flowing stream in the upper reaches of the river. Like most desert rivers, its course sometimes meanders, causing the width and depth to vary.

Runoff following precipitation in the desert mountains is usually quite rapid due to the steep slopes and the absence of large stands of water-holding vegetation. Therefore, after a thundershower, dry streambeds can quickly fill with water, and often create flash floods.

Colorado River. The Colorado River, forming the eastern boundary of Riverside County, is one of the major rivers of the western United States. Prior to the control of the river, large and damaging floods were common in the general area of Blythe. Hoover Dam, completed in 1935, eliminated most of the extreme floods in the area as did the subsequent construction of Parker and Davis Dams, and the Alamo Dam on the Bill Williams River in Arizona.

Flooding along the Colorado River is caused by water releases from upstream dams and inflow from tributaries located below the dams. To protect areas subject to flooding, a levee system with a 100 year flood capacity was constructed. Flooding that might occur would only inundate the low-lying cultivated areas along the river. The City of Blythe, as well as outlying urban parcels would not be affected.

Other Areas. In addition to the more defined water courses, extensive or damaging flooding may be expected in other areas of the County. Many low-lying areas, though removed from major streams, may be subject to sheet flow or ponding. In the desert areas, alluvial fans and washes pose significant



hazards to life and property. While normally dry, a storm within the watershed may result in sudden inundation of the wash, or the creation of a new flood course in the alluvial fan area.

### GOALS

To minimize loss of life, injury, damage to property, and social and economic dislocations resulting from flood or dam inundation hazards.

### OBJECTIVES

1. To incorporate flood hazard considerations into the County planning and development review processes.
2. To identify areas of significant flood hazards and promote special land use regulations for those areas.
3. To promote standards that will enable critical and essential facilities to remain operational during and after a disastrous flood.
4. To minimize costs to both the government and to the general public for providing community protection from disastrous flooding.
5. To provide for the public safety during and after major flooding.
6. To encourage the consideration of flood hazards as a factor in assessing property.

### POLICIES

1. Recognize hazards posed by flooding or dam inundation as significant constraints when determining suitable land uses and densities within an area. (Objectives 1, 4).
2. Utilize data contained in the Technical Report for the purpose of regulating the type and intensity of land use in areas subject to flooding and/or immediate dam inundation. (Objectives 2, 4).
3. Pursue a program for the identification and evaluation of flood related hazards not initially included within the Technical Report. These areas are subject to recurrent local flooding and include flash floods, sheet flow, local ponding, and washes. (Objectives 1, 2).



4. Excepting those flood control facilities intended to reduce flooding, critical or essential facilities should not be located within the boundaries of the 100-year flood plain unless reasonable alternative sites are not available. It must also be demonstrated that although mitigation may be difficult, flood hazards will be adequately mitigated.
5. Encourage the preservation of flood plains in open space uses. (Objectives 2, 4, 5).
6. Consider the susceptibility of property to flood damage as an important factor in valuation.

## IMPLEMENTATION PROGRAM

### Phase I

- Develop a procedure determining the ability of lands to support various types and intensities of use, incorporating flooding and dam inundation considerations as a basic component. (Policies 1, 2).
- Begin a program of incorporating flood and dam inundation considerations into the general plan and all area plans. (Policy 1).
- Encourage and assist school districts and agencies involved with the aged or handicapped to develop educational programs of their own relative to hazard awareness. (See Seismic and Geologic Hazards Policy Plan-Implementation - Phase I).
- In line with countywide planning goals and objectives, plan for, and as funding becomes available, construct needed flood control facilities. (Policy 1).

### Phase II

#### Short Range

- Review existing, and where necessary, develop new regulatory means for restricting development on flood plains and in flood hazard areas in order to adhere to the regulatory standards and planning considerations required by the Flood Disaster Protection Act of 1973 for participation in the National Flood Insurance Program. (Policies 2, 5).
- Review the existing Watercourse, Watershed, and Conservation Areas (Zone W-1) as to the way in which reflects the goals, objectives, and policies outlined in this policies plan. Where necessary, initiate procedures to revise the zone. (Policy 2)/



- Determine the feasibility and desirability of utilizing available provisions of the Williamson or Quimby Acts as a means of preserving flood plains in open space uses. (Policy 5).
- Review gaps in existing studies and prepare a work program for detailed flood hazard studies in areas where significant flood hazards have been reported but for which no published studies currently exist. Priorities should be based on the degree of anticipated flooding and potential risks to life and property. (Policy 3).
- As funding becomes available, prepare detailed flood hazard studies as per the work plan developed above. (Policy 3).

#### Long Range

- Expand the area of detailed mapping (1" = 2000') to include additional developed or developing areas within the County. (Policy 3).
- Incorporate the technical information contained in the Seismic Safety/Safety Elements into a countywide computerized environmental data bank. (Policies 2, 3).

### 5. FIRE HAZARD COMPONENT

#### INTRODUCTION

Riverside County possesses extensive areas of open space, mostly mountain ranges and desert. These areas are a valuable resource; however, rugged topography, dry weather, and large areas of highly flammable brush combine with increasing numbers of people to create extreme fire hazards throughout a large part of the County. Between 1966 and 1974, there were 18,995 fires in the unincorporated areas of Riverside County, not including fires within the Cleveland and San Bernardino national Forests and other Federal lands. Over 140,000 acres were burned and damage to watershed and structures totaled over \$25 million. In this same period, there were a total of 15,549 fires in the Riverside County portion of the Cleveland National Forest. Between 1966 and 1975, there were nearly 300 fires specifically within the San Jacinto District of the San Bernardino National Forest.

It is the purpose of this policy plan to recognize and mitigate existing fire hazards, as well as to minimize to the greatest possible extent, increased risks resulting from second home developments and increased access to wildland areas.

#### TECHNICAL SUMMARY

Fires are generally classified as either "wildland" or "structural". Fires in undeveloped areas resulting from the ignition of accumulated brush and wood are termed "wildland



fires". These fires may consume extensive acreage and result in serious damage to watershed, wildlife and structures. The main causes are smoking, incendiary, machine use, debris burning, and railroads. "Structural fires" refer to those that originate from sources within a structure. Major causes include smoking in bed, faulty electrical wiring, appliance malfunctions, children playing with matches, and the improper handling or storage of flammable materials.

### Wildland Fires

The wildland fire potential in an area is a function of naturally occurring fire hazards (vegetation, climate, and topography), human related fire risks (proximity of urban areas to wildlands), and protective capabilities (response time, fire protection agencies, and water supply). The degree to which these factors contribute to the overall fire hazard of an area varies. Hence, wildland fire prevention requires a comprehensive approach.

The California Division of Forestry (CDF) has developed a methodology, known as the Fire Hazard Severity Classification System to describe the extent of naturally occurring fire hazards in an area. The basic determinants of the classification are fuel loading (vegetative type), climatic conditions, and slope. Human risk related factors are not included in the system at this time, but will be included in the near future.

Vegetation. The type of vegetation found in an area often helps determine the amount of fuel available for a fire and its spreading potential. It also influences the expected length of time between fires. The classification system identifies three types of fuel loading: light fuels such as flammable grasses and annual herbs; medium fuels represented by scrubs; and heavy fuels which include brush and woods. Chaparral covers most of the County's hazardous fire areas. Because of its dense growth and natural dryness, chaparral may exhibit an almost explosive flammability, burning intensely, spreading quickly, and resisting control. In areas where chaparral has become dense, fire hazards are significantly increased.

A number of methods can be used to reduce the impact of fuel loading or wildland fire hazards, including, clearing, type conversion, controlled burning, and fire breaks. After reviewing national fire records for the period 1950-1959, the U. S. Forest Service determined that 52% of all man-made fires originated within 33 feet of the roadway. In 1974, the Riverside County Fire Department found a similar pattern occurring in the County. About 8% of the State's wildland fires are caused by railroad operations. Nearly all of these fires started within 25 feet of the right-of-way. Clearing flammable vegetation from these critical areas could significantly decrease the incidence of wildland fires; however, some serious negative impacts may result. Roadsides could be severely eroded, washing mud and debris onto roadway. Runoff



could be significantly increased and cause or intensify downstream flooding. Rather than clearing highly flammable vegetation, heavy fuels in many areas could be replaced by light fuels such as greases or by fire resistant vegetation. Vegetative type conversion can also be used to enhance wildlife resources.

Climate. Riverside County's climate, generally characterized by mild winters and hot, dry summers, encourages the growth of extensive ranges of chaparral. Coupled with occasional droughts, a critical period of fire hazard is created between May and November. Commencing about September, strong, dry winds called "Santa Anas" occasionally blow from the northeast. The strength and drying effect of these winds compound an already high fire hazard. When a fire erupts during a Santa Ana condition, burning embers are driven far in front of the main fire, creating numerous spot fires. The rate of fire spread is rapid, often four to six square miles per hour, making containment extremely difficult. Extra precautions and alertness are necessary when climatic conditions intensify fire hazards.

Topography. Topography in Riverside County varies greatly, and in combination with solar heating, is responsible for small-scale local wind conditions, creating local updrafts or "chimney effects". These updrafts burn more rapidly upslope than downslope, the greater the slope, the greater the rate of spread. Slopes also intensify fire hazards by hindering access by fire trucks

and crews. The effect of topography on fire hazards must be recognized by limiting development in areas where access by fire crews will be limited and areas where development will be endangered by the swift upslope movement of a fire.

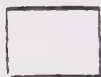
Human Proximity. The human element, including children playing with matches, smoking, vehicles, campfires, and incendiary is the major cause of wildland fires. As rural population, leisure time, and mobility increase, human-caused wildland fires can be expected to become even more numerous unless adequate precautions are taken.

The type of land use in an area is a key factor to be considered. For example, residential or recreational uses located in or near wildlands increase the probability of fire as a result of children playing with matches, smoking, etc. Structural fires located in an urban-wildland transition areas could develop into a wildland fire. On the other hand, conversion of grass or brush lands to agricultural uses could reduce fire hazards, but may have concomitant negative effects, such as increased erosion and loss of vital watershed lands. Thus, an area's land use may affect the degree of wildland fire hazards both positively and negatively, urban uses generally having the more serious consequences.



**TABLE 19.5**  
**FIRE HAZARD SEVERITY SCALE**

Critical Fire Weather Frequency		III*	
Fuel Loading		Slope %	
	0-40	41-60	61+
Light (Grass)			
Medium (Scrub)			
Heavy (Woods-Brushwood)			



Moderate



High Hazard



Extreme Hazard

\*Riverside County is all Class III.

SOURCE: CDF, A Fire Hazard Severity Classification System for California Wildlands, April 1, 1978.



The Riverside County Fire Ordinance contains specific requirements intended to reduce fire hazards resulting from human activity in high fire hazard areas. General precautionary measures include requirements for building permits, maintenance of fire breaks around improved real property; clearing of vegetation from around railroad and electrical transmission rights-of-way; safe burning of flammable materials; and prohibition of fireworks except in a public display. Within areas identified by the ordinance as having high fire hazards, the County Fire Warden may close any area to public access and may also require land owners to clear and maintain adequate Fire Safety Hazard Zones around structures.

In rural, high fire hazard areas, parcel maps are the predominant form of land division. In most instances these divisions create parcels larger than one acre and are, therefore, generally not required to provide for fire protection except in special circumstances. Also, the ordinance map identifying hazardous fire areas is basically a map of lands adjacent to the National Forests, and is not based on the Fire Hazard Severity Classification System. The map should be revised, utilizing the Fire Hazard Severity methodology.

### Structural Fires

Since most of our time is spent in structures--homes, offices, factories-- structural fires tend to pose a greater hazard to life than do wildland fires. Structural fires, which are primarily attributable to conditions of the structures and the activities within them, have a great number of causes. Most fires, both structural and wildland, are due to human carelessness. Many structural conditions can be adequately dealt with in various codes such as building and electrical. Provisions of these codes are not addressed in this element, although discussion of some subjects that would desirably be part of a comprehensive fire code is included. Dealing with human carelessness is a process that requires extensive public education.

Approval of development in high fire hazard often leads to the development of improved access roads and availability of public utilities which may encourage the location of additional residences, second homes and cabins, resorts, recreational areas, and other urban-type uses. Thus, structural fires may generate destructive wildland fires, and wildland fires may engulf numerous structures. Development proposals in high fire hazard areas should be examined not only on an individual basis with attention paid to on-site hazards but should also be viewed in a broader sense, examining the potential off-site and cumulative effects. Should development be permitted, appropriate mitigating measures must be provided for.

Scattered urban-type developments and numerous rural homesites tend to pose fire protection problems. Such developments are often too far from fire stations to permit reasonable response



times, yet they are not large enough to justify construction of a new local fire station. Private wells and rural water systems often do not provide adequate water for fire fighting. Equipment and manpower available in rural areas is also limited. As development in rural areas proceeds, expenditures for additional fire protection facilities become necessary in order to provide adequate protection. In short, despite the inability to support it, scattered urban development often creates the need for levels of service greater than the basic level of protection provided by the County Fire Department.

Industrial uses pose additional fire and safety hazards. While rural industry provides much needed non-farm employment, it also taxes the ability of the County Fire Department to provide adequate protection. While fire suppression capabilities may be sufficient for grass or small residential fires, given a basic level of protection, an industrial fire involving chemical or other dangerous substances poses unique problems. Approval of industrial uses in rural areas should be made only after careful study of the development's potential fire hazards. Maintenance of pre-run files by the County Fire Department and California Division of Forestry helps to keep fire fighters aware of special hazards which may be encountered, and to alert dispatchers to the probable need for additional units or special equipment.

The production, storage, and transportation of industrial products such as petroleum, natural gas, explosives, chemicals, and pesticides may present a great threat to life and property in the event of fire. While extremely hazardous and toxic substances routinely pass through the County every day, the extent and degree of this hazard is not precisely known.

### Fire Protection

Fire protection within Riverside County involves seven separate entities of government.

- The U.S. Forest Service is responsible for the federally-owned forest lands within the San Bernardino and Cleveland National Forests.
- The military is responsible for their installations.
- Murrieta and Idyllwild have individual fire protection districts.
- The Rubidoux Community Services District provides fire protection within its boundaries.
- Incorporated cities are responsible for fire protection within their boundaries.
- The California Division of Forestry is responsible for wildland fires in forest, watershed,



and range areas (State Responsibility Areas) on all state and privately-owned areas and incorporated cities.

Fire protection is also provided on a contractual basis to the cities of Indian Wells, Desert Hot Springs, Rancho Mirage, Palm Desert, and Lake Elsinore.

Under an agreement between Riverside County and the California Division of Forestry, the County provides funds for manpower and operation of CDF stations during the four-month winter period. Throughout the County, the RCFD and CDF utilize equipment and manpower within each other's responsibility areas, acting as a single agency. The Riverside County fire-fighting force includes full time, paid field fire control personnel, supplemented by State personnel during the eight-month fire season, and support forces. A large volunteer force, which operates 46 fire stations, is an integral part of the County fire protection system.

A major factor in the protection of life and property is the time required for men and equipment to arrive at the scene of a fire. In general, response times in the range of five to eight minutes are considered maximum in the case of structural fires. A longer response time will result in the loss of most of the structural value. In the case of wildland fires, the variability of other factors makes response times somewhat less crucial; however, rapid response can greatly reduce the acreage involved.

Four factors affect response times: fire station organization, distance, grade, and road conditions (physical conditions, weather, and traffic). In general, a volunteer force will often take longer to respond to a fire than does a full time professional force. In many cases, however, the difference may not be significant. While it is true that a professional force can provide greater protection, the costs for such a force may outweigh the benefits, and be beyond the fiscal ability of the community.

Several stations in the County, especially in the eastern areas, have exceedingly large areas of responsibility and therefore, delayed response times to their perimeters. In other areas, urban-type developments and rural homesites may be located beyond an eight minute response distance from the nearest station. Care must be taken that urban-type development occurs within a response distance of approximately five miles, and that new stations are located to minimize response time to structures within its area of responsibility. The physical condition of the road, including steep grades, weather, and the amount of traffic can lengthen response times. Another consideration in regard to response times is the occurrence of simultaneous fires in a given responsibility area; when a fire-fighting force is committed to one fire, there may be considerable delay in response to a second.



Once the firefighting crew arrives at the scene of a fire, it is important that there be sufficient water with which to suppress the fire. A large part of Riverside County exhibits deficient fire flows, generally attributable to a lack of community water system and use of private wells or to the use of out-dated water systems which do not meet current requirements. Deficient water supply areas should be identified and development in those areas discouraged until improvements are made. Evaluating each delivery system is a difficult, but essential task. In areas where no water system currently exists, an adequate domestic water system should accompany any urban development.

### PLANNING CONSIDERATIONS

Riverside County's Fire Protection forces currently possess minimum equipment and full-time personnel to meet expected fire situations. A great deal of reliance for adequate response to a fire is placed upon volunteer forces. In view of the continuing increase in population and the resulting increase in the number of responses to fire calls, an ever greater demand for fire protection services may be expected in the future. Fire insurance rates are exceptionally high in most areas of the County. To a great extent, this is due to water supply problems and a continuing dependence upon volunteer forces.

The Seismic Safety/Safety Element Technical Report provided the beginning of research into the extent of fire hazards within Riverside County. Much additional research is needed, such as (1) an evaluation of the County's water delivery systems as to their adequacy to provide fire protection, (2) development of a system to supplement the Fire Hazard Severity Classification System with human-related risk factors (proximity and response capabilities), (3) an assessment of the extent of risks related to the use of hazardous materials, and (4) a review of General Plan policies and fire-related ordinances. The Insurance Services Office is currently conducting a comprehensive review of fire protection throughout the County. When available, their recommendations for improvement should be implemented wherever feasible.

It is not feasible, however, to defer fire hazard mitigation programs until these studies are completed. Fire hazards in Riverside County are a real and immediate threat to life and property. It is, therefore, necessary to proceed based on available information, keeping in mind that as new and more accurate information becomes available, policies and programs can be modified, expanded, or added.

### GOALS

To minimize loss of life, injuries, property damage, loss of natural resources, and social and economic dislocations due to fire.



## OBJECTIVES

1. To provide the maximum feasible level of fire protection, recognizing state-of-the-art advancements in fire fighting technology and procedures, as well as the County's ability to pay for improvements.
2. To provide for the public safety during and after major wildland and structural fires.
3. To identify the extent of fire hazards, evaluating both natural and man induced factors for the purpose of introducing these considerations into the general plan process.
4. To reduce the potential of wildland fires by controlling the type and intensities of land uses permitted in fire hazard areas and establishing necessary development standards.
5. To encourage placing the cost of providing necessary fire protection to urban uses or concentrations in areas subject to High or Extreme fire hazard upon those who will directly benefit.
6. To design and locate fire stations and other emergency or critical facilities so as to enable their continued operation.
7. To emphasize a Fire Prevention program, including reduction of fuel loading in wildland areas, inspection and abatement of hazardous conditions in and around structures, and public information, as being of importance equal to that of fire suppression.

## POLICIES

1. Support the development of a Fire Protection Master Plan for the purpose of further assessing the magnitude of fire hazards, risks, and the corrective measures necessary to provide an optimal level of fire protection. (Objectives 1, 2, 3, 4, 5, 6, 7).
2. Strive to reduce fire insurance premiums by evaluating Insurance Services Office (ISO) recommendations and implementing those that reflect acceptable cost-benefit ratios. (Objectives 1, 4, 6).



3. Recognize and support the volunteer program of the Riverside County Fire Department as an integral part of the fire protection program. (Objective 1).
4. Locate new fire stations where they will most effectively reduce the potential loss of life, injury, and property damage. (Objectives 1, 2, 6).
5. Recognize susceptibility to wildland fires as a significant constraint when determining suitable land uses and densities within an area. (Objectives 2, 3, 4).
6. Utilize the Fire Hazard Severity Classification System to determine the natural fire hazard in all areas of the County for the purpose of evaluating proposed land divisions, general plan amendments, and other similar planning matters. (Objective 3).
7. Supplement the Fire Hazard Severity Classification System with risk-related factors such as human proximity and information regarding the adequacy of water supplies and protective facilities. (Objective 3).
8. Discourage small lot development in areas of High or Extreme fire hazard where there is no adequate and reliable source of water provided.
9. Discourage the provision of complete fire protection services by independent districts where duplication of effort and related costs can be avoided by the formation of a local improvement district to fund the necessary increased level of fire protection. (Objectives 1, 5).
10. Critical of essential facilities should not be located in High or Extreme fire hazard areas without an appraisal of the vulnerability to fire, its potential as a source of ignition, and application of acceptable mitigation measures. (Objectives 2, 6).
11. Recognize the probable effects of a major earthquake upon fire protection capabilities including facilities, access, and water supply. (Objective 6).
12. Support code enforcement programs for the purpose of reducing the risk of fire through the correction or abatement of hazardous structures or uses. (Objectives 1, 7).



13. Support adult and juvenile educational programs intended to increase awareness of the danger of fire and how to protect lives and property in the event of a major fire. (Objectives 1, 7).

## IMPLEMENTATION PROGRAM

### Phase I

Utilize available information regarding fire hazards and associated risks in determining land use policies and in making decisions on development proposals, particularly in High or Extreme fire hazard areas. (Policies 5, 6, 7).

As funding becomes available, designate and sign escape routes which will allow public evacuation in a disastrous fire situation.

Maintain a vigorous code enforcement program which will (1) inspect fire hazardous structures throughout the County, issuing citations and demolition orders where necessary; (2) enforce the provisions of the County Fire Ordinance and fire-related provisions of other County Ordinances, such as the Subdivision ordinance and Building Code; and (3) assure that applicable State Regulations are being enforced. (Policy 12).

Define the types of uses and minimum density within the three fire hazard classes that require fire protection services exceeding the basic level of protection provided by the County Fire Department. (Policies 6, 7, 8, 9).

### Phase II

#### Short Range

Prepare objective criteria for the optimal siting of new fire stations. (Policies 1, 2, 4).

Map the degree of fire hazard throughout the County using the Fire Hazard Severity Classification System. (Policy 6).

Continue efforts to supplement the Fire Hazard Severity Classification System with risk related information including urban proximity, areas of delayed response time, areas of inadequate fire flow, and special hazards. (Policy 7).

Determine the feasibility of, and consider authorizing the transfer of surplus fire fighting or emergency equipment and vehicles to the volunteer organizations. (Policies 2, 3).

#### Medium Range

Determine the feasibility and desirability of directing the Riverside County Fire Department and Planning Department to prepare and recommend for adoption a Fire Protection Master Plan which will:



- Analyze the ratings and recommendations for an improved level of fire protection made by the Insurance Service Office for the purpose of determining what corrective measures may be economically feasible in terms of cost/benefit and would most probably result in a reduction of fire insurance rates.
- Study hazards involved in production, transportation, and storage of various potentially hazardous products such as petroleum, natural gas, explosives, chemicals, and pesticides, and recommend appropriate mitigation measures.
- Evaluate each water supply system as to its adequacy and reliability for fire protection and develop a workable program to correct deficiencies.
- Review adopted general plan goals, objectives, and policies related to fire hazards and recommend appropriate revisions.
- Review the adequacy of adopted fire-related development policies and standards, particularly in regard to fire protection requirements for parcel map land divisions for single-family residences in rural areas, and recommend appropriate ordinance revisions. (Policies 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13).

## 6. NATURAL HAZARD AND DISASTER PREPAREDNESS COMPONENT

### INTRODUCTION

Earthquakes, floods, and wildland fires are natural occurrences, and as such, cannot be prevented by man. In the natural environment, these events may alter the landscape, but pose little threat to mankind. It is when man settles areas subject to natural hazards that risk to life and property is created. Previous chapters of the Seismic Safety/Safety Element have dealt with minimizing risks to life and property from the standpoint of recognizing the extent and probable location of potential natural disasters and altering settlement patterns and structural design. It is the purpose of this chapter to deal with the question from the standpoint of assuring a speedy recovery once a natural disaster has occurred.

It is the responsibility of all public and quasi-public agencies to help reduce loss of life and property damage resulting from a natural disaster. However, due to the large number of public, quasi-public, and private agencies involved and their differing areas of responsibility, cooperation and close coordination among them is necessary. The Director of the County Office of Disaster Preparedness would, therefore, consider holding regular meetings with representatives of the County,



cities, safety agencies, utilities, and other involved private agencies to help foster a cooperative response and achieve the necessary coordination while exchanging and incorporating the most up-to-date technical information available regarding:

- the probable location and magnitude of natural disasters
- organization, administration, and coordination of disaster response efforts in the areas of debris removal, evacuation, and emergency communication; law enforcement, fire protection, and rescue; health services; welfare and shelter services; and public utilities services
- maintenance of critical facilities and provision of emergency services.

### TECHNICAL SUMMARY

#### Organization and Administration

The goal of the existing Disaster Operations Plan is

To ensure effective use of its capabilities, should a disaster affect the County, by taking such actions as may be required to save lives, minimize damage, and maintain and restore damaged facilities essential to the health, safety, and welfare for the affected area in the event of peacetime disaster.

The Operations Plan, which is coordinated by the Riverside County disaster Preparedness Office, divides the County into an eastern and western zone, each responsible for coordination of operations within its area. Overall control is intended to be from the Riverside Emergency Operations Center (EOC). If that facility is not functional, control passes to the Indio EOC. Upon declaration of a Local Emergency by local authorities or a State of Emergency by the Governor, the Disaster Operations Plan is put into effect. The Chairman of the Board of Supervisors directs the Disaster response as the Disaster Corps Commander.

Coordination of all concerned parties, including public and quasi-public agencies, is a necessity if the Disaster Operation Plan is to be effectively implemented. In addition, private organizations will be called upon to aid in disaster response. Close coordination between community leaders and these agencies will be necessary to assure an adequate distribution of resources and an efficient response effort following a natural disaster. It is, therefore, necessary to include these agencies in the disaster preparedness planning effort.

Riverside County is structured to both give and receive mutual aid in any one of the several disciplines which may be required. Under California law, mutual aid is not limited to fire and police assistance only, but may encompass any



resource available to any jurisdiction including manpower and/or equipment. Adequate disaster response not only requires a plan, but also depends upon the availability of resources and trained personnel. In the case of a local disaster, outside mutual aid may be expected. There could, however, be significant delays involved in receiving the aid due to disruptions in the County's transportation and communication systems. Even more serious disruptions may be expected if the disaster is regional in nature. Therefore, the County must prepare potential disaster areas for limited periods of self-reliance and promote the rapid resumption of vital services.

Debris Removal, Evacuation, and Emergency Communication. Accumulation of debris following a disaster slows evacuation, rescue, and recovery efforts while hindering the re-establishment of vital communication links. Rescue operations and restoration of services following a natural disaster are often hampered by fallen bridges, collapsed overpasses, and debris covered roadways. All available means of debris removal as well as mobilizing emergency crews should be reviewed. This effort would include both public and private resources.

Evacuation procedures vary according to the type and intensity of the disaster, topographic features, population densities, and available transportation routes. The Task Force will develop evacuation plans to encompass the special characteristics of a variety of natural disasters including seismic, geologic, flood, and fire emergencies. While assistance through mutual aid can be expected, the County should prepare itself for a period of total self-reliance following a disaster.

Debris removal and evacuation procedures (if appropriate) are largely contingent on the establishment of emergency communications. Communications now utilized by fire, police, sheriff, California Highway Patrol, and other state and local governmental agencies have been duplicated and placed in the Emergency Operations Centers. Mobile equipment in cars, etc., have a reasonable degree of expectancy of survival. It must be realized, however, that in a disaster of major magnitude communications facilities have always been overloaded, and it is reasonable to expect that such would be the case in the event of a major earthquake in Riverside County.

Law Enforcement, Fire Protection, and Rescue. The Sheriff's Department is responsible for law enforcement in the unincorporated areas of the County and certain contract cities. Following a natural disaster the sheriff will have responsibility for maintaining civil order by guarding against looting, providing traffic control, emergency aid, and related services.

Fire protection within Riverside County involves several separate entities each of which as a specific area of responsibility. Mutual aid agreements for fire protection are well established although in the event of certain disasters such as an earthquake, such aid may not be immediately unavailable.



The structural evaluation of fire systems as well as the identification of alternate routes is vital in preparing for a natural disaster.

### Health Services

The County Health Director is responsible for coordinating health services necessary for effective disaster response as outlined by the Riverside County Disaster Operations Plan. In the event of a major disaster, one of more of the hospitals within Riverside County may be destroyed or damaged to such an extent that they would not be operational. Should this occur, two options would be available. One would be to evacuate patients to hospitals situated in areas which are not affected by the disaster, and secondly, to utilize Packaged Disaster Hospitals which have been stored for such an eventuality. These Packaged Disaster Hospitals can accommodate from 100 to 200 beds and contain all medical equipment necessary to place the hospitals into operation with the exception of the basic shelter. Therefore, it is envisioned that existing facilities such as schools, abandoned store building, etc. would be utilized as medical centers. There are presently six such hospitals stationed within the County.

### Welfare and Shelter Services

Food and shelter services coordinated by the County Public Social Services Director following a disaster depend heavily on private community groups. The American National Red Cross is deemed responsible by its charter to administer human welfare services (food, clothing, and shelter) in times of natural disaster. Additional assistance can be expected from other organizations such as Catholic Community Services and the Salvations Army, utilizing schools and auditoriums for temporary shelter.

### Public Utilities

Most of the developed areas of Riverside County are dependent upon quasi-public agencies for the provision of utilities such as water, sewerage, natural gas, electricity, and telephone. The interruption or loss of these utilities for any extended period of time will have serious effects upon community social and economic order. There are certain precautionary or preparatory measures that should be considered as part of the County Disaster Preparedness Program.

The historic ability of the public utilities to provide lifeline services during and after an emergency and to restore utility service following a disaster has been recognized. The continuous provision of lifeline utilities is a basic requisite, and each utility should be prepared to provide for the safe, immediate restoration of community utility services.



Water and Sewerage. Water distribution and treatment systems are essential facilities which should be designed to withstand a major disaster. Following a major disaster, water supplies flowing into the County may be interrupted. It is, therefore, necessary to assure adequate water storage for periods of self-sufficiency. If local water supplies are interrupted, domestic and commercial services should be curtailed so that distribution to hospitals and other emergency facilities can be maintained.

The loss of sewerage facilities may pose serious health problems in a disaster situation. Sewerage facilities should be designed to accommodate seismic activity and be protected from flood waters. Plans for quickly spotting and repairing damaged lines should be formulated.

Electricity. Most electrical power in the County is purchased from a single supplier (Southern California Edison). In the event of a major disaster, some electric power supplies could be cut, significantly hindering relief efforts. Therefore, the use of secondary sources of power, such as on-site generators, for essential services should be examined for use in an emergency.

Natural Gas. Natural gas transmission systems are located underground and are thus susceptible to rupture in an event of ground movement. The hazard of fire following a disaster such as an earthquake should be recognized in utility design characteristics. Plans for rapid inspection and restoration of service should be formulated.

Telephone. Riverside County is served by Pacific, General, and Continental tele-communications systems. Localized interruption of services can often be rectified by switching to alternative lines; but a major disaster could have larger portions of the County temporarily without telephone service. Telephone systems have generally responded well to disaster situations.

## GOALS

To establish and maintain community preparedness and to assure an appropriate response in the event of a major natural disaster so as to reduce loss of life, injury, property damage, and social and economic dislocations.

## OBJECTIVES

1. To incorporate technical information regarding seismic, geologic, flooding, dam inundation, fire and other hazardous natural events into disaster preparedness plans.



2. To encourage the efficient allocation of emergency food, shelter, and medical supplies and the rapid restoration of community order following a natural disaster.
3. To encourage the safe, rapid, and orderly restoration of public services as well as those provided by quasi-public and private agencies.
4. To recognize the necessity of total self-reliance for some undefined period of time following a regional natural disaster.
5. To encourage the coordination of the disaster plans of public, quasi-public, and private organizations to enable different response in disaster situations.
6. To promote an informed citizenry that will recognize the potential dangers resulting from natural hazards and be capable of taking appropriate measures to reduce the loss of life, injury, and property damage.

#### POLICIES

1. Afford the preparations of natural hazard disaster response plans first priority, as the most effective short-term means of protecting public health, safety, and welfare in the event of a major natural disaster. (Objectives 1, 2, 3, 4, 5, 6)
2. Support the concept that individuals, agencies, or organizations who will necessarily perform significant disaster response functions, participate directly in the development and review of the County Disaster Operations Plan.
3. Periodically update the Natural Disaster Preparedness Plan and assess its operational status and efficiency. (Objective 1)
4. Encourage potentially hazardous industries, and large scale industrial, commercial, residential, and institutional organizations to prepare natural disaster preparedness plans. (Objective 5)
5. Support mutual aid agreements and encourage a program of self-sufficiency in various geographic areas. (Objectives 2, 4, 5, 6)
6. Recognize the special needs of dependent populations in disaster situations. (Objectives 7, 8)



7. Support public information programs and solicitation of citizen involvement in disaster preparedness and response so as to promote a more informed public. (Objectives 6, 7)

## IMPLEMENTATION PROGRAM

### Phase II

#### Short Range

In cooperation with the State Office of Emergency Services, schedule and conduct a countywide natural disaster preparedness drill for the purpose of identifying deficiencies in the existing disaster preparedness plan. (Policy 4)

Organize a Natural Disaster Preparedness Task Force composed of public, quasi-public, and private organizations for the purpose of developing a coordinated Natural Disaster preparedness Plan. This plan will examine:

- organization and administration
- critical structures or facilities
- debris removal, evacuation, and emergency communications
- law enforcement
- health services
- welfare and shelter services
- public utilities
- transportation

(Policies 1, 2, 3, 5, 6, 7)

#### Medium Range

Expand and coordinate community programs that train volunteers to assist police, fire and official recovery personnel during and after a major natural disaster. (Policies 3, 8)

Encourage all potentially hazardous industries and large-scale industrial, commercial, residential, and institutional organizations to prepare and submit to the Office of Disaster Preparedness, natural disaster preparedness plans. (Policies 1, 3, 5, 6)

Periodically review and update the Natural Disaster Preparedness Plan and conduct drills to maintain efficiency. (Policies 1, 3, 4, 5, 6)





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## 7. SPECIAL CONDITIONS COMPONENT

### a. Scope

The location of Cathedral City is one which presents special conditions due to environmental factors, especially climate, which are unique to the Coachella Valley. The special conditions addressed here are: wind/blowsand, temperature extremes and availability of solar energy. These are all products of the climate of the City and to some degree are interrelated issues. This component is intended to provide analysis of these conditions and describe generally how they can be accommodated and capitalized upon to maximize the safety, convenience and efficiency of the community.

### b. Existing Conditions

Blowsand, the physical interaction of sand and wind, is influenced by physical characteristics of the Valley, including drainage, meteorology and climate, and is a condition which affects residents and development opportunity in the Coachella Valley.

The geologic formation of the Valley is such that it becomes a trough bounded by high terrain. Winds in the Valley are a result of marine air moving inland toward areas of lower barometric pressure. These become high velocity winds when an inversion exists over the San Geronio Pass. These winds pick up sediment and move southeasterly. Most blowsand initially begins its journey on the Whitewater River floodplain, east of Windy Point and is transported southeasterly down the Valley confined by the trough.

Cathedral City is within the area defined by Coachella Valley Association of Government (CUAG) as a "Blowsand Hazard Zone". This zone is defined as "...all land, by nature of its location or soil characteristics, subject to real or potential sand accumulation and/or abrasion damage or land which may cause sand damage to adjacent property". However, the zone is provided for general planning purposes and is not an exact indicator that regulation of land development with the general area should be appropriate to reduce the problem.)

The lack of vegetation cover characteristic of the desert environment, has contributed to the blowsand activity. Meanwhile, man's activities have had both beneficial and adverse effects. Such activities as those related to construction have generally contributed to the problem by freeing sand. Generally speaking, land development has stabilized areas.



However, during the development process adverse conditions can be created if precautions are not taken.

The climate of the Coachella Valley is typical of the arid desert areas characterized by low precipitation, predominantly occurring in the winter months (October through April), low humidity, high summer temperatures, mild sunny winters, and winds at certain times of the year. Because the Valley is surrounded on three sides by mountain ranges, prevailing westerly air masses are relieved of their moisture as they are forced upward over the ranges and cooled. The mountain community of Idylwild averages approximately twenty-nine inches of precipitation while the Valley floor receives generally three to six inches.

The climate of the area is summarized in the table below:

Table 20

Climate Summary: Northwestern Coachella Valley

<u>Period</u>	<u>AVERAGE TEMPERATURE</u>			<u>RAIN</u>	<u>HUMIDITY</u>		
	<u>Min.<sup>2</sup></u>	<u>Mean<sup>2</sup></u>	<u>Max.<sup>2</sup></u>	<u>Inches</u>	<u>4 a.m.</u>	<u>Noon</u>	<u>4 p.m.</u>
January	39.1	53.7	68.3	1.22	57	32	32
April	52.6	69.9	86.9	.25	55	22	19
July	73.2	90.6	107.8	.29	60	28	25
<u>October</u>	<u>56.5</u>	<u>73.0</u>	<u>91.4</u>	<u>1.33</u>	<u>58</u>	<u>27</u>	<u>28</u>
Year	54.7	70.9	87.5	7.07	58	27	26

SOURCE: National Weather Service Palm Springs Station

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<sup>1</sup> Coachella Valley Association of Governments, "Blow-sand Control and Protection Plan", June 1977, p. 22.



Air movement within the Valley is dominated by a westerly flow with variation in direction, velocity, and duration depending upon the season. High winds which occur during certain times of the year, particularly in the upper Valley near Windy Point, are generally associated with temperature inversions created over the San Geronimo Pass which confines air movement, within the Pass. Warm air calms normally occur during the summer months, though the month of May is the windiest month of the year. In the fall, strong winds known as "Santa Anas" push exceptionally dry inland air into the region from the East. Thus periodic air movement causes the humidity to drop resulting in cloudless skies through October and November.

Meteorological and climatic conditions culminate in an environmental backdrop beneficial to both the tourist and agricultural economies of the Coachella Valley. However, there are adverse impacts relating to air quality and energy conservation.

The typically dry climatic conditions of the Valley result in intense solar radiation, high temperatures and cloud free sunshine. The high temperatures which predominate throughout the year within the Coachella Valley place excessive demands on electric and other energy sources.

The use of solar radiation for heating living space and domestic water supplies is becoming more important as part of the solution to the nation's energy problems. On-site collection and utilization of solar radiation is safe, sustainable, and relatively impact-free. However, if solar is to be seriously considered as an effective energy source, steps must be taken to ensure an adequate and perpetual supply of incident sunlight available to collectors. In 1978, the California Legislature passed two bills which were signed into law, AB 3250, the California Solar Rights Act, and AB 2321, the California Solar Shade Control Act. The two statutes establish and protect the legal right to sunlight falling upon solar collectors under certain conditions.

Although legal rights to an unblocked source of sunlight to collectors is a complex issue, the physical concept of solar access is easier to describe. The sun's position relative to the earth follows predictable patterns capable of being mathematically and geometrically described. In simple terms, the sun rises in the east, sets in the west, is approximately due south at noon, and achieves a higher angle with respect to the southern horizon in the summer than in the winter. Also, in California, the



demands of development. The primary focus of attention for Cathedral City residents has been protection from the intense solar radiation and heat of the summer season.

To assess these energy requirements, the need for heating and cooling can be quantified in degree days. A degree day is a unit based upon temperature difference and time. For any one day, the day's average temperature is calculated. Each degree Fahrenheit that the average is below 65 degrees F is one degree day. Thus, a 50 degree F average temperature day is a 15 degree day and a season with the equivalent of 100 such days would be a 1,500 degree heating day season.

In the Coachella Valley sunny-cool winter average only 870 degree heating days. In summer there are 1,458 full load cooling hours and 2,724 hours with the outside temperature above 80 degrees F. But, for a total of 54 percent of the early morning hours (2:00 a.m. to 9:00 a.m.) the outside air temperature is below 80 degrees F.<sup>1</sup>

d. Opportunities/Constraints

Given the negative effects of blowsand, an issue arises as to the tradeoffs between applying blowsand mitigation measures versus precluding urbanization in blowsand zones. Among the facets of the issue are: the identification of land uses which may in fact be compatible with blowsand action; the degree to which better site planning and building construction techniques might reduce conflict between blowsand and urbanization; and the concept of "safe corridors" where the presence of a road or other facility is deemed so important as to require construction and maintenance no matter how difficult or costly.

Though considered a hazard, blowing sand within the Coachella Valley does have some positive aspects. The blowsand regions of the Coachella Valley provide a unique desert environment that has both scenic and ecological significance. The sand dunes and sparse environment of the blowsand area offer the viewer another perspective on the desert's ecosystem. This area also provides unique habitat for certain biological species including the Fringe-Toed Lizard. The blowsand belt has provided such a significant hazard to human intrusion that it has in the past had a major impact on limiting growth and its direction within the Coachella Valley.

A real issue arises as to whether blowsand even can be controlled, and hence the value of attempting



sun rises slightly south of east and sets slightly south of west in the winter, while rising slightly north of east and setting slightly north of west in the summer.

In a physical sense the solar access requirements of a solar collector or collectors define a space in the sky above the collector surface which must be kept free of obstruction for a maximum efficiency of the solar collector. Such a volume and configuration of space is called a "skyspace" or "skyview". Solar access, then, is the protection of this skyspace from obstruction by planning, design, policy, and legal methods.

c. Needs

Blowsand poses principally two public health and safety concerns. The first concern is respiratory problems attributable to poor air quality, i.e., blowsand introduces a high level of suspended particulates into the air. A second concern is motor vehicle accidents brought about by reduced visibility during severe blowsand storms.

Blowsand can lead to significant property damage and increased property maintenance costs. Motor vehicles, homes, and other buildings can be scoured and pitted by strong blowsand forces, in the same manner as if such property were subjected to commercial sandblasting. Maintenance costs for keeping roads free of drifting sand, removing piled up sand from the sides of fences and building, replacing damaged transmission lines and other utilities are all examples of the negative impacts of blowsand upon urbanization. Examples of this problem are evident especially in the northern portion of the City.

The temperature aspects of climate have an important impact on energy demand. Insulation to protect interior areas from the effects of exterior temperature changes is likely deficient in structures built to minimum standards. Structures of this type are predominate in areas of low cost housing such as those in some areas of the City. Persons with limited housing budgets are attracted to such areas but lose savings in reduced structure costs to higher utility costs, or are forced to live uncomfortably.

The utilization of solar energy to meet some of the energy needs of communities is now a topical planning issue. Previously little attention was given to the availability of solar energy to meet energy



- 1.1.2 Program: Develop standards for measures adequate to provide blowsand protection.
- 1.1.3 Program: Establish a blowsand control ordinance and enforcement mechanisms to insure provision of blowsand protection and the continued maintenance of such facilities.
- 1.2 Policy: The City shall encourage the use of landscape and building materials suitable to the extreme temperatures occurring in the City.
  - 1.2.1 Program: Develop a system of review and approval for landscape and building materials in proposed developments.
- 1.3 Policy: The City shall establish appropriate mechanisms to provide and protect solar access.
  - 1.3.1 Program: Implement the State law regarding solar access provision and protection by local ordinance.
  - 1.3.2 Program: Establish a system of review and approval for solar design aspects of new development.



such controls. Such control can be partial (wind breaks, sand barriers) or total (paving over those areas where the wind picks up its source material). Control can be long-term or temporary (barriers created today may be overwhelmed by sand dunes within one or two years). Controls on natural blowsand conditions may prove futile when man-made conditions create a strong blowsand potential.

The overall warm dry climate of the area makes it attractive during the winter season to tourists and seasonal recreation enthusiasts. The heat of the summer becomes overwhelming and a liability rather than an asset. The hot dry season constrains the type of landscaping and building materials. An ultimate limitation on such materials is the ability to survive these conditions. When the issues of energy and water resource conservation are included, the number of suitable materials and design is further reduced.

The consideration of solar access and protection can lead to increased efficiency and reduced energy demand. Energy and energy conservation measures are addressed in a separate element of the General Plan. At this point only the strong relationship between energy conservation and demand, and the solar characteristics of the climate of the City are to be stressed. Solar access rights to insure availability of sunlight for summer and winter water heating and winter space heating must be balanced with the need for solar protection during the summer months.

#### e. Objectives, Policies and Programs

Based on the conditions, issues, needs and opportunities outlined above, the following objectives are established as desired future conditions toward which the Plan is directed. Policies and programs are also identified to achieve objectives and maximize opportunities.

1. Objective: The community is able to live satisfactorily with the special conditions which prevail in the areas.

1.1 Policy: The City shall require blowsand protection of new development in those areas in which it occurs.

1.1.1 Program: Determine specific areas subject to blowsand hazard and activities which create such hazards.



**IV.**

**IMPLEMENTATION PLAN**















#### A. SCOPE

The implementation program for the General Plan should be a coordinated set of specific measures and actions the local government intends to use in carrying out the policy of its General Plan. As with the approach to data and analysis, the Plan varies on specificity of implementation measures, depending upon significance of identified need.

Implementation actions called for in the General Plan and mitigation measures contained in the Master Environmental Impact Report indicate programs, actions and practical requirements for carrying out Plan policies. These actions and programs enable the immediate and longer-term implications of the policies and mitigation measures to be understood more clearly.

The implementation program should consist of measures consciously selected, not just a list of "possible" measures. A few well conceived measures will accomplish more than a long list of "possible" measures. As a practical matter, the General Plan becomes a more effective guide when it includes specific implementation measures. Policies tied directly to an implementation program will be more realistic and practical. A detailed, short-term program which can be reviewed annually also links the policies of the general plan directly to capital improvement programming and the annual budget cycle. In addition, explicit implementation measures in the General Plan establish a commitment to action and define accountability. For these reasons, a near-term program is presented in the following sections for inclusion with the adopted Plan.

#### B. PROGRAM

The program presented here is built upon the policies and programs identified within the Plan and upon the mitigation measures identified in the Master EIR. The intent of the implementation program is to not only identify implementation actions, but to also establish a framework for carrying those actions through to fruition. In order to accomplish this, the framework to be established must address the priority of actions to be taken, time frames for action, program responsibility, technical or legislative support requirements, possible funding methods, and possible consultant support work.

The simplest format for expressing the Implementation Program and the relationships of the various actions proposed in a matrix table with basic Plan implementation needs identified against the following criteria for action:

1. **Priority Allocation:** A ranking of programs from those most critical to implement the Plan to those that could be deferred if funding or staff were not available.



2. Program Time: An estimate of program duration or a target start up, however time frames are contingent upon funding and staffing levels.
3. Program Description: A brief description of the program and a reference to its origin in the Plan or Master EIR.
4. Program Responsibility: The lead agency or department charged with development, management or adoption of the program.
5. Technical or Legislative Support Provisions: Identification of technical expertise or data required in developing the program, or identification of governmental bodies necessary in overall program enforcement, funding or adoption.
6. Possible Funding Methods: Identification of funds, grants or other funding sources to augment City General Funds in providing program implementation.
7. Possible Consultant Work: Identification of possible technical and professional work that could augment staff or provide specialized expertise.

#### C. TOOLS

There are several basic tools used to implement General Plans. All will be used by Cathedral City.

1. Zoning: The Zoning Ordinance is the most powerful tool available to implement the goals, objectives, and policies of this Plan. An exercise of the police power, it is used to "protect the health, safety, morals, and welfare" of the community. While the General Plan designates the proposed location of uses desired by the community, it is through the Zoning Ordinance that the City establishes the actual pattern of development. The current zone code is now being revised to fit the proposed General Plan.
2. Subdivision Regulations: These regulations are used to assure that development projects which create five or more parcels are in compliance with the General Plan, the Zoning Ordinance and Development Standards. Regulations are used to provide for public services and facilities such as streets, drainage facilities, open space and parks. These regulations, along with the Zoning Ordinance, should be reviewed to ensure that they implement the goals, objectives, and policies of this Plan.



3. **Environmental Impact Review:** CEQA provides cities with the opportunity to critically review development projects. This review allows the City to consider the possible adverse and/or beneficial impacts individual projects and their design may have on social and physical environments of Cathedral City. The City's planning process requires developers to complete an Environmental Assessment Form to determine possible adverse impacts prior to formal filing of development plans. It is anticipated that the master EIR to be certified by the City on the General Plan will permit negative declarations, mitigated negative declarations or focused EIRs on most projects.
4. **Site Plan Review:** The planning process provides an opportunity for the City to critically inspect and review significant proposed development plans. The review evaluates the proposal's compatibility with the surrounding environment and adherence to the intent of the General Plan and provisions of the Municipal Code.
5. **Capital Improvement Program:** The CIP is a five year budget program which contains a projection of the City's expenditures for acquisition and development of public facilities as well as the provision of public services.
6. **Redevelopment Area:** The establishment of redevelopment project areas makes available to the City powerful methods of improving existing conditions and tapping future tax revenue resources to assist in their funding.
7. **General Plan Consistency:** The Government Code requires a finding that development projects are consistent with the General Plan. The following outline is suggested as the basic format for reaching a conclusion that a project is or is not consistent with the General Plan.

"Answers to the following questions constitute the essence of the Cathedral City General Plan in response to a proposed project (public or private). They form the basis for a finding of consistency.

- a. Does it place activity where the City wants activity to be?

Activity Centers  
Neighborhood Centers

- b. Will it add to the City's revenue flow?

Short Term  
Long Term  
Leverage



- c. Will it contribute toward keeping Cathedral City a place where working class residents can afford to live?

Housing Choice  
Housing Cost  
Jobs

- d. Will it contribute to the City's overall balance of uses?

Direct  
Indirect

- e. Is it in character with the community sector in which it is located?

Use  
Improvements  
Design

- f. Is enough money committed for the necessary capital improvements?

Source  
Amount  
Timing

- g. Does it respond to special needs that exist in the City?

Elderly  
Homeowners  
Business Community  
Youth  
Tourists  
Others

- h. Are all necessary public facilities and services available?

Roads  
Flood Control and Drainage  
Schools  
Water  
Sewer  
Police  
Fire  
Utilities

- i. Will it improve the City's appearance and image?

Positive Contribution  
Reasonable Cost



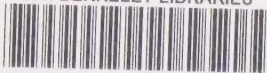
- j. Will it contribute to community safety and convenience?

Protection from Hazards

Relation to Other Uses

Relation to Transportation System"





C124895075

Production from research  
related to the use  
of the computer in the  
teaching of mathematics

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